OKI

OL400*e*/400*ex*/410*ex*/ PostScript Board Option LED Page Printer

Troubleshooting Manual with Component Parts List

All specifications are subject to change without notice.

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1. OUTLINE

This manual has been written to provide guidance for troubleshooting of the OL400e Series Printer (primarily for its printed circuit boards), on an assumption that the reader is knowledgeable of the printer. Read the maintenance manual for this printer P/N M-521073 (ODA) and/or P/N M-521074 (OEL) if necessary.

Notes:

1. The paver supply board (OLAA) containing a high voltage power supply is dangerous. From the viewpoint of the safety standards, the local repairing of a defective board is not allowed. Thus. the objects to be locally repaired as a result of troubleshooting are switches and fuses.
2. Replacement of CPU (MHM2028K) is not recommended. If CPU is found to be defective, board replacement is suggested.

2. TOOLS

For troubleshooting the printer, the tools listed below may be needed in addition to general maintenance tools.

Tool	Remarks
Extension cord kit	P/N: 4YA4121-2028G1
Oscilloscope	Frequency response 100 MHz or higher
Soldering iron	A slender tip type, 15-20 watts

3. CIRCUIT DESCRIPTION

3.1 Outline

The control board controls the reception of data transferred through a host I/F and processes command analysis, bit image development, raster buffer read. It also controls the engine and the operator panel. its block diagram is shown in Fig. 3-1 through 3-4.

(1) Reception control

The control board has one centronics parallel I/F port and one RS-232C serial interface port. The PostScript board (option or resident) has one LocalTalk (RS-422) serial interface port. One of the two or three I/F ports which receives data first can be used automatically.

The other I/F port outputs a busy state signal.

The parallel I/F port can specify the following item when set by the control panel:

I-PRIME: Enabled/Disabled

The RS-232C I/F port can specify the following items when set by the control panel:

Flow control	: DTRHI/DTR LO/XONXOFF/RBSTXON
Baud rate	: 300/600/l 200/2400/4800/9600/19200 (Baud)
Data bit	: 7/8 (bits)
Minimum busy time	: 200/1000 (ms)
Parity	: NONE/ODD/EVEN

The LocalTalk (RS-422) I/F port, which can be used for PostScript emulation mode, can specify the following items when set by the control panel:

Protocol:	LocalTalk/RS-422
RS422 settings	
Baud rate:	300/600/1200/2400/4800/9600/19200/38400 (Baud)
Data bit:	7/8 (bits)
Panty:	NONE/ODD/EVEN

An interface task stores all data received from the host into a receive buffer first.

(2) Command analysis processing

The OL400e series printers have the following emulation modes.

Laser Jet Series IIP Plus	: Hewlett Packard	OL410e/OL410ex
Laser Jet Series III	: Hewlett Packard	OL400e/OL400ex
PostScript Level 2	: Adobe	OL410ePS/others with PS option board

An edit task fetches data from the receive buffer, analizes commands, and reconstructs the data in such a way that print data are aligned from up to down and from right to left; then it writes the resultant data into a page buffer with such control data as print position coordinate, font type, etc. added.

(3) Font Processing

When one page editing is finished, a developing task makes an engine start and fetches data from the page buffer synchronizing with a printing operation; then it developes the fetched data to a bii map as referring to data from a character generator, and writes the resultant data into the raster buffer (of band buffer structure).

(4) Raster buffer read.

As controlling the engine operation, an engine task sends data from the raster buffer to the LED head.

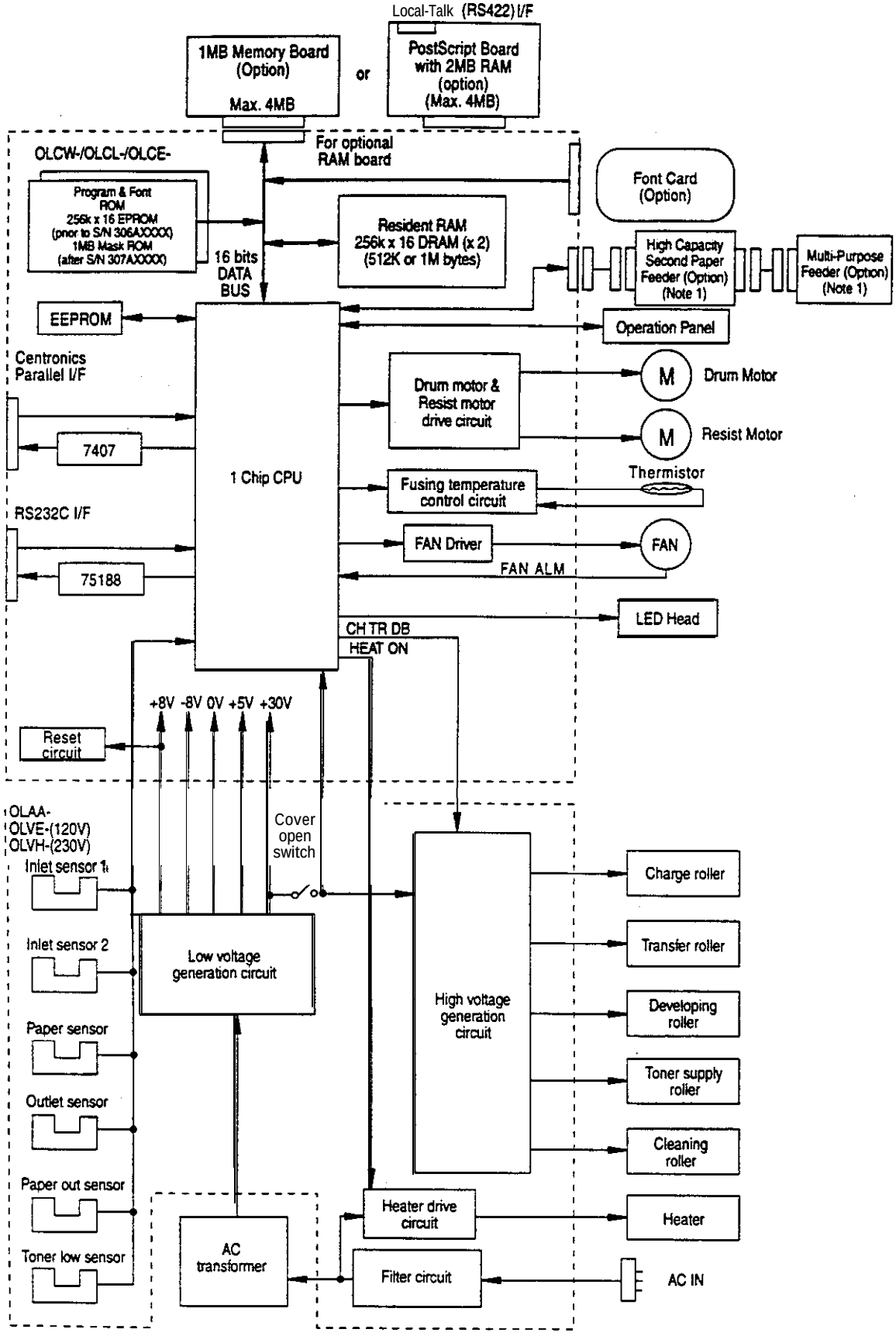


Figure 3-1 OL400e/OL400ex Block Diagram

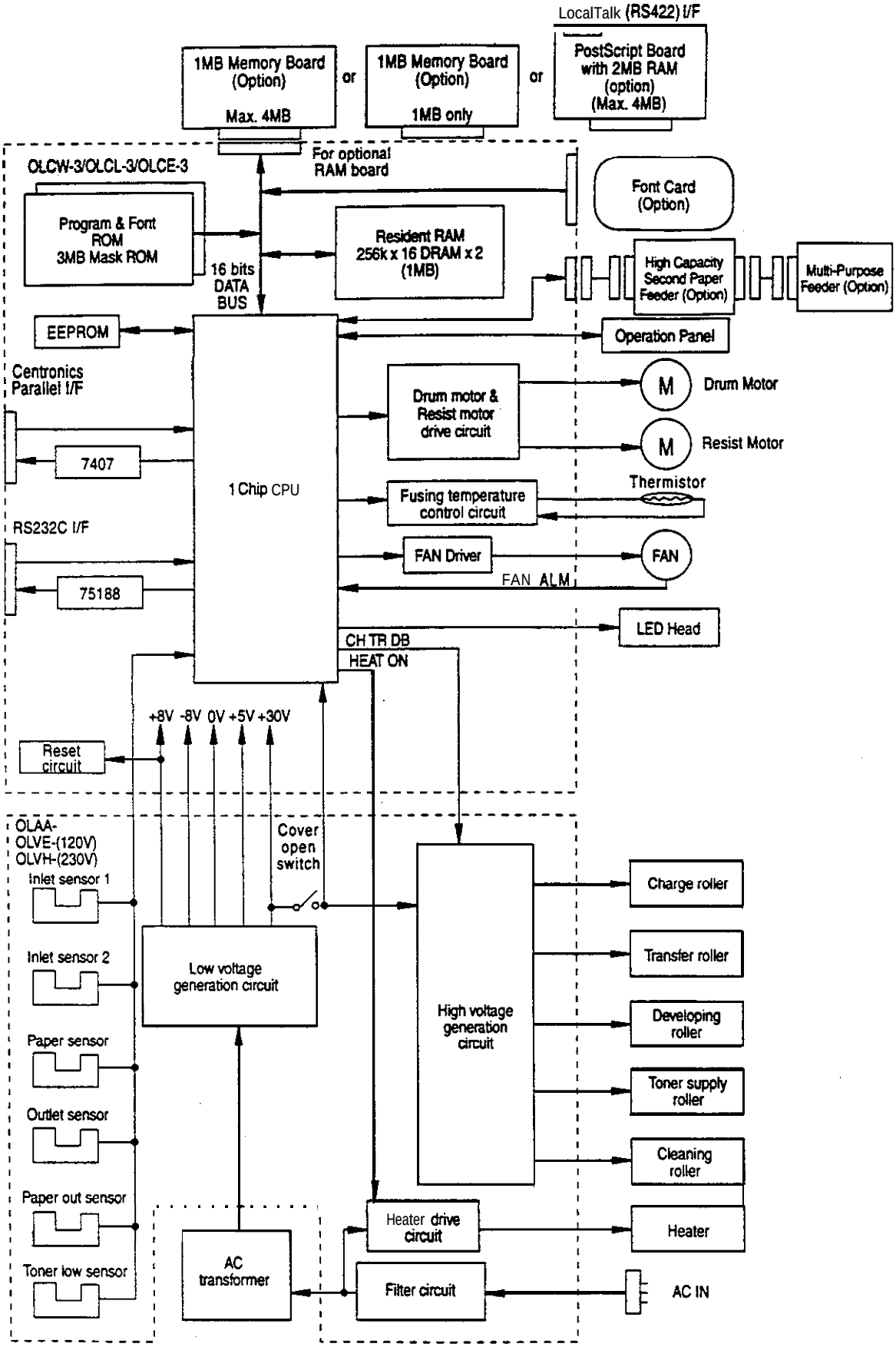


Figure 3-2 OL410e/OL410ex Block Diagram

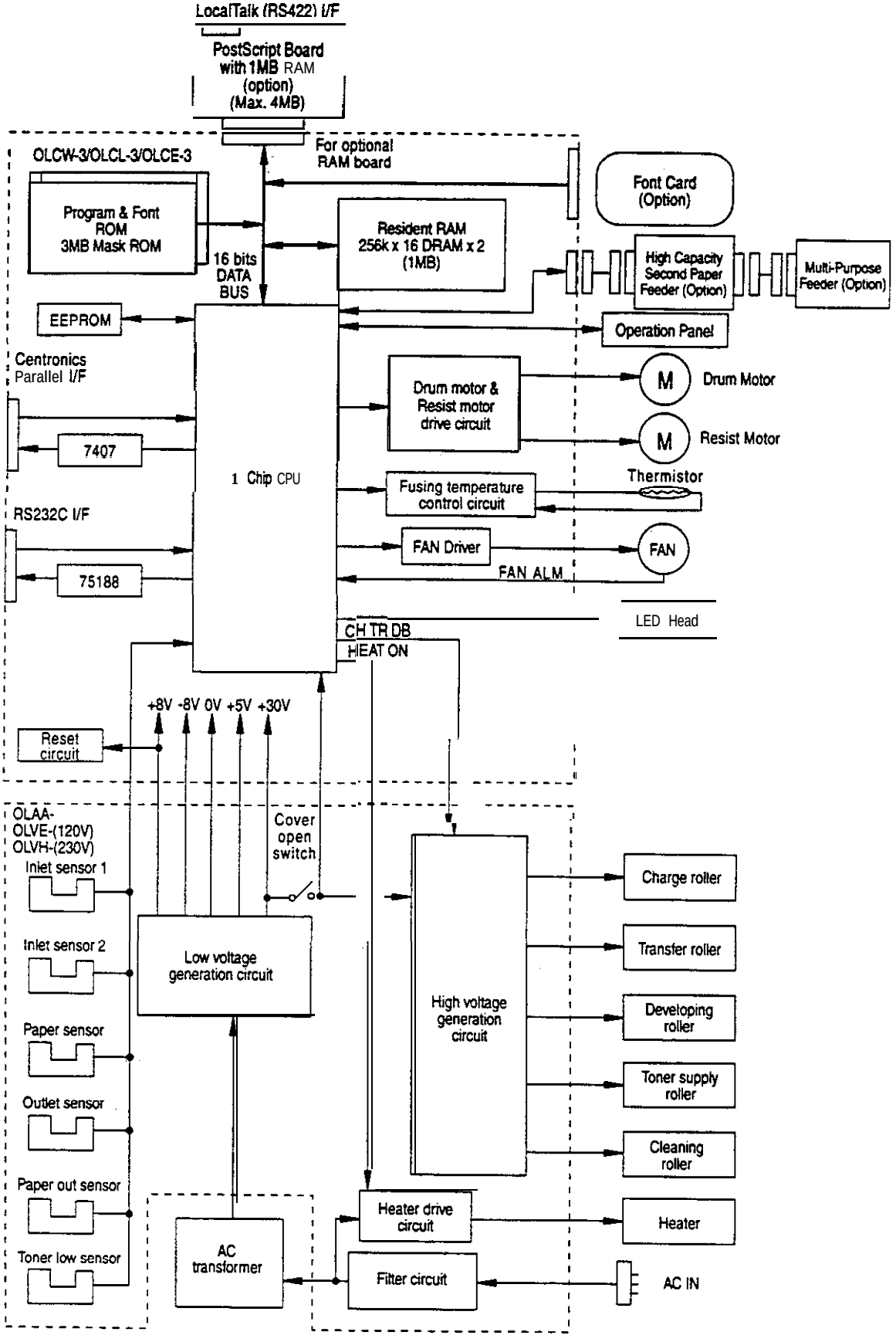


Figure 3-3 OL410ePS Block Diagram

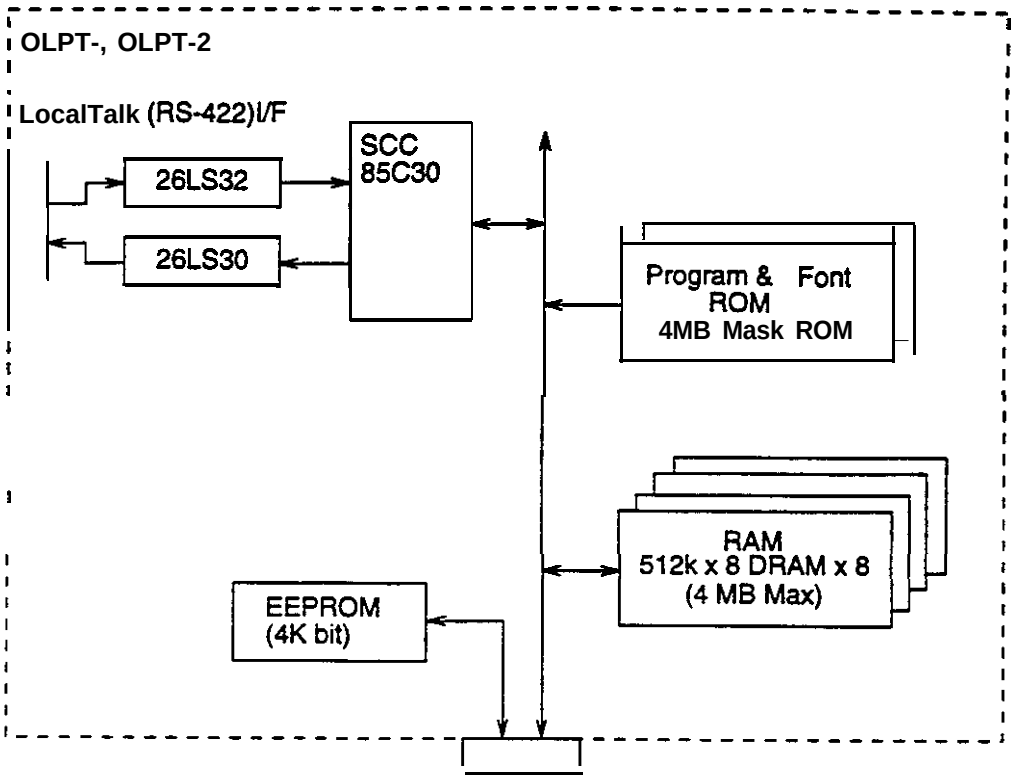


Figure 3-4 PostScript Board Block Diagram

3.2 CPU and Memory

(1) CPU (MHM2028K-001K)

CPU core	RISC CPU (MIPS R3000 compatible)
CPU clock	15.9744 MHz
Data bus width	Exterior 16 bits, Interior 32 bits

(2) Program ROM

ROM capacity	512k bytes (4-Mbit EPROM or mask ROM one piece) or 1MB (6-M bit mask ROM) or 2MB (16M bit mask ROM)
ROM type	4M bits (256k x 16 bits) or 6M bits (512k x 16 bits) or 16M biis (1M x 16 bits)
Access time	100 ns

(3) Resident RAM

RAM capacity	512k bytes (4-M bii D-RAM one piece) or 1MB (4M bit D-RAM, 2 pieces)
RAM type	4M biis (256k x 16 bits)
Access time	80 ns

(4) Expansion RAM

RAM capacity	Max. 4M bytes (4-M bii D-RAM 8 piece)
RAM type	4M bits (512k x 8 bits)
Access time	80 ns

The block diagram of CPU and memory circuit is shown in Fig. 3-5 through 3-10.

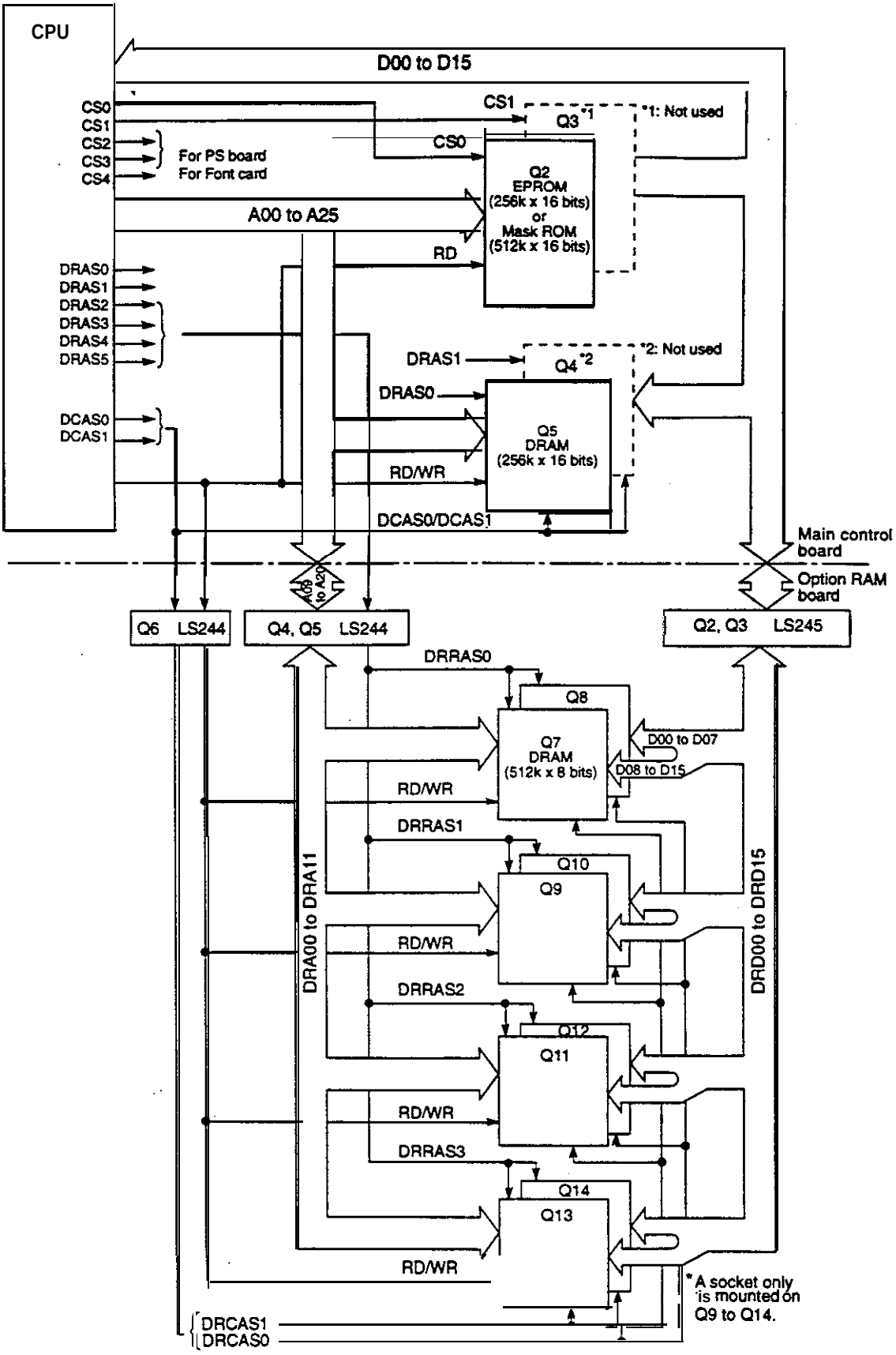


Figure 3-5 Block Diagram of CPU & Memory in OL400e/OL400ex

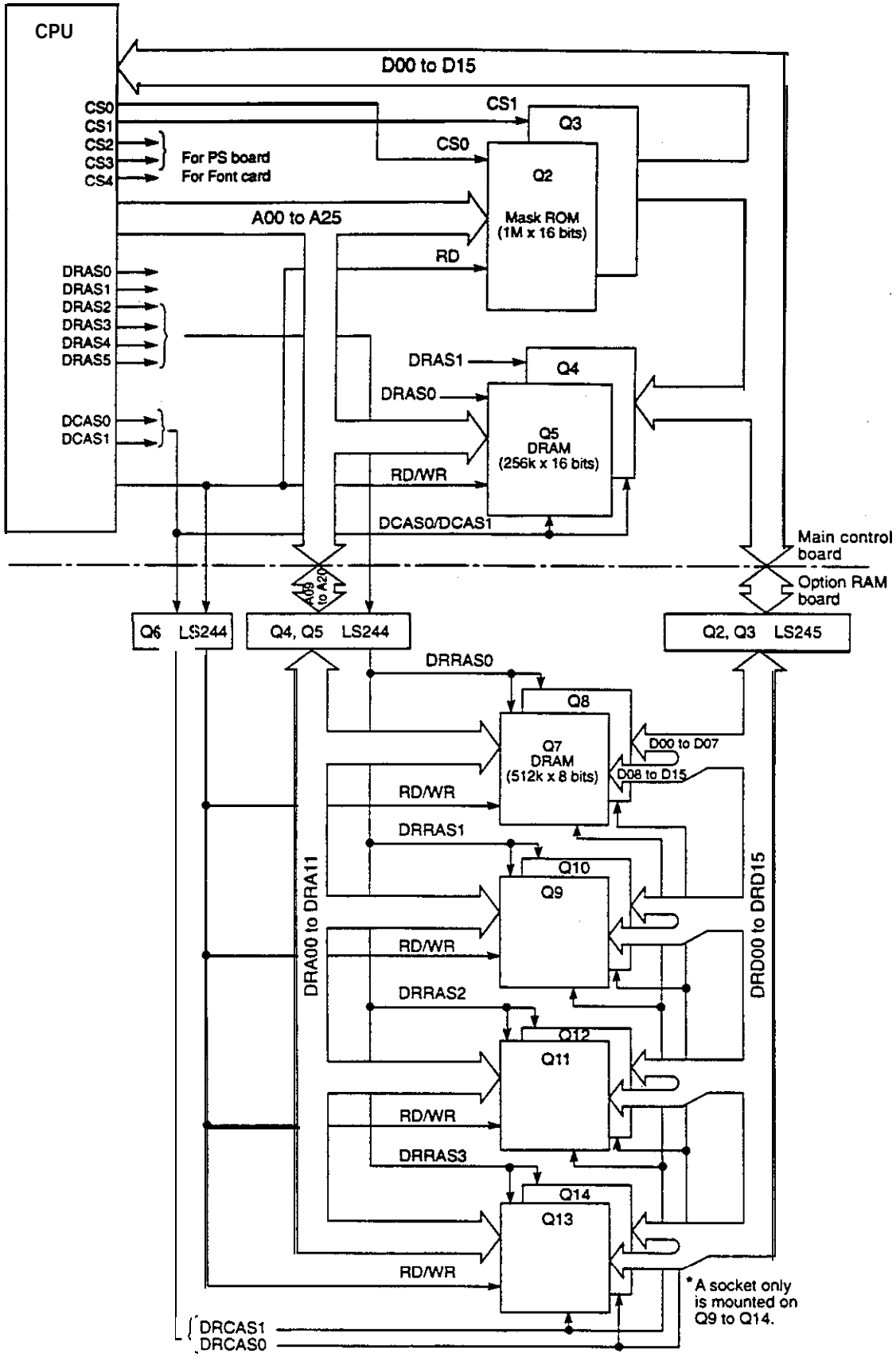


Figure 3-6 Block Diagram of CPU & Memory in OL410e/OL410ex

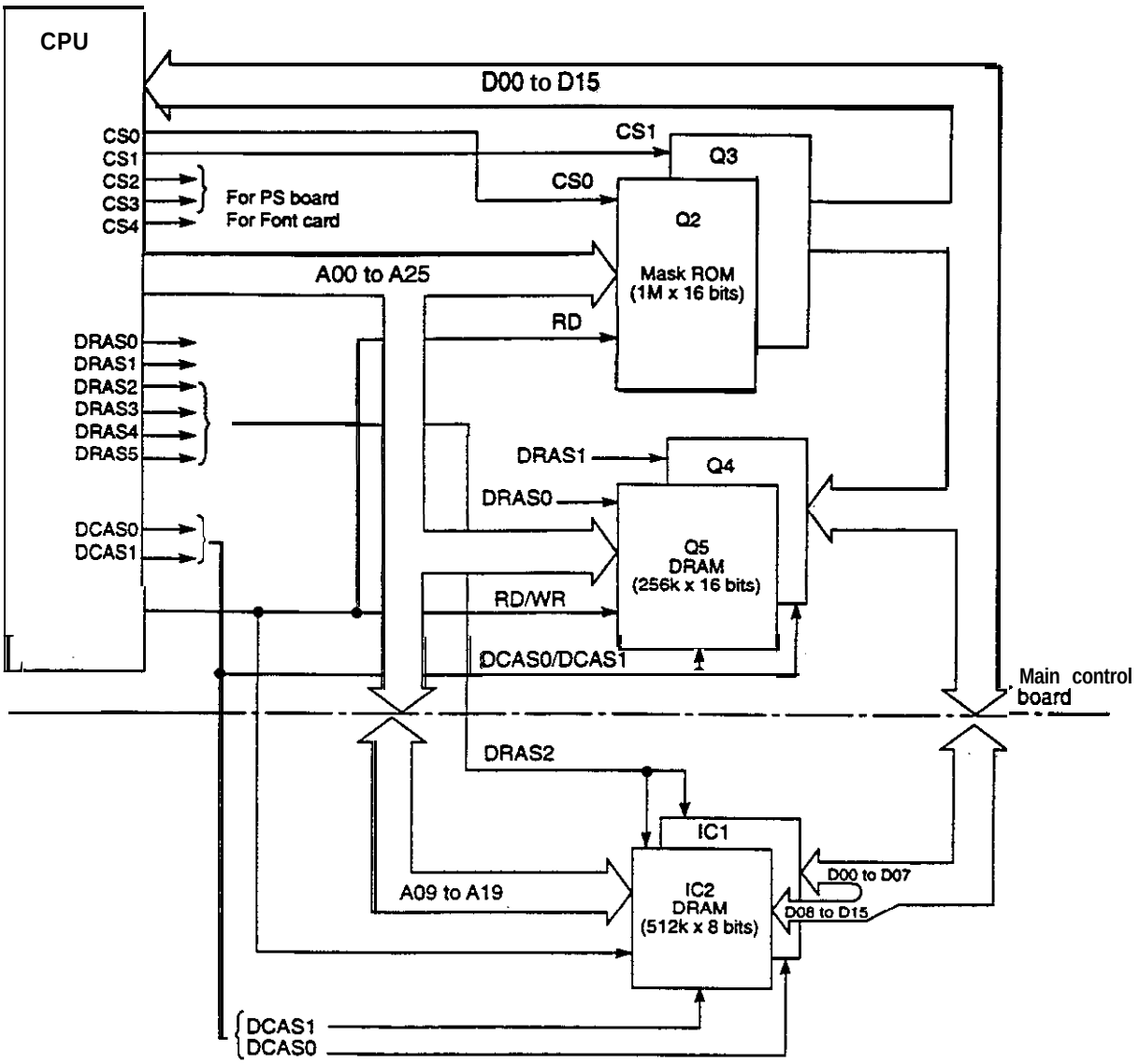


Figure 3-7 Block Diagram of CPU & Memory in OL410e with 1MB only Board

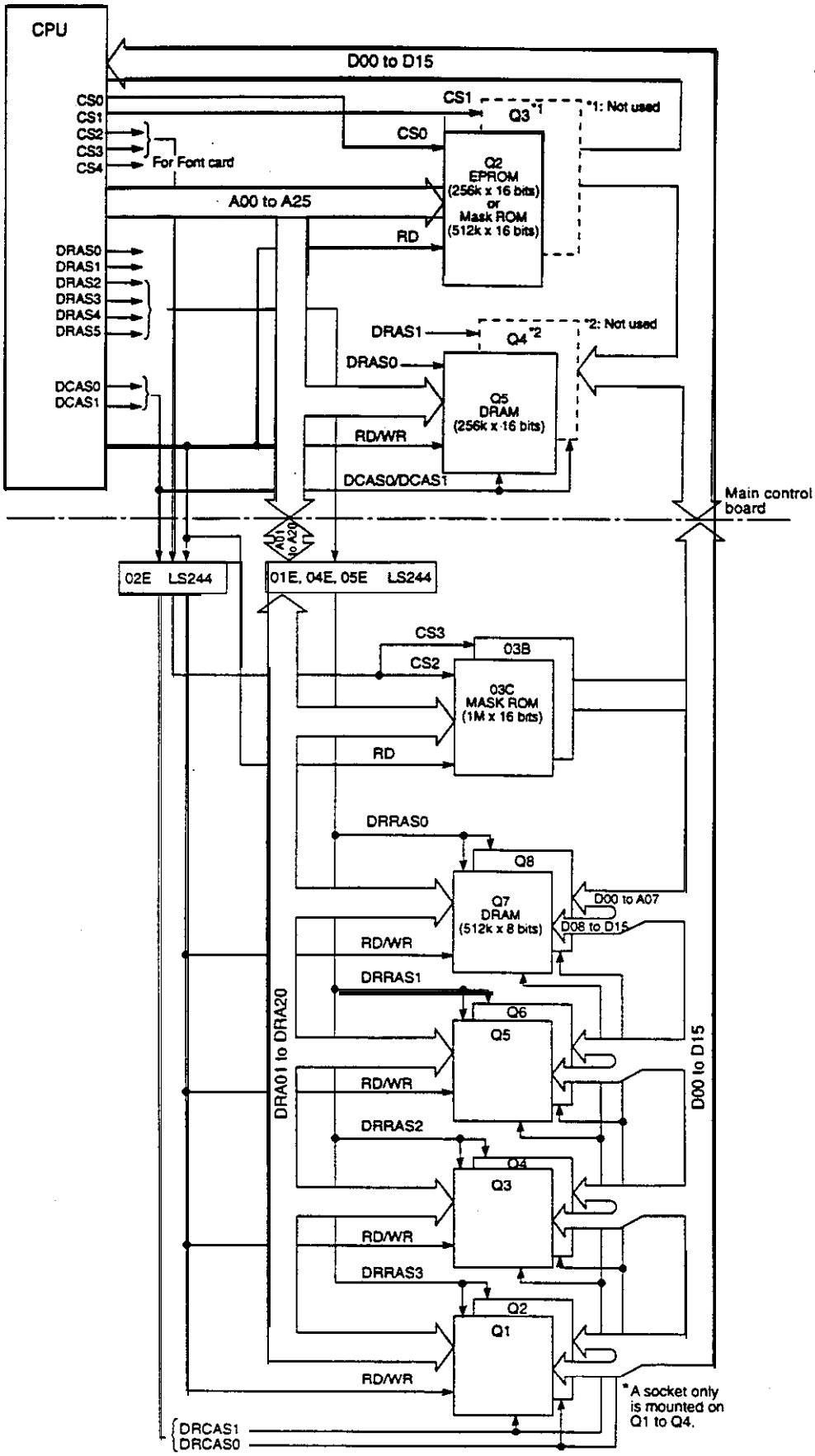


Figure 3-S Block Diagram of CPU & Memory in OL400e/OL400ex with PS Board

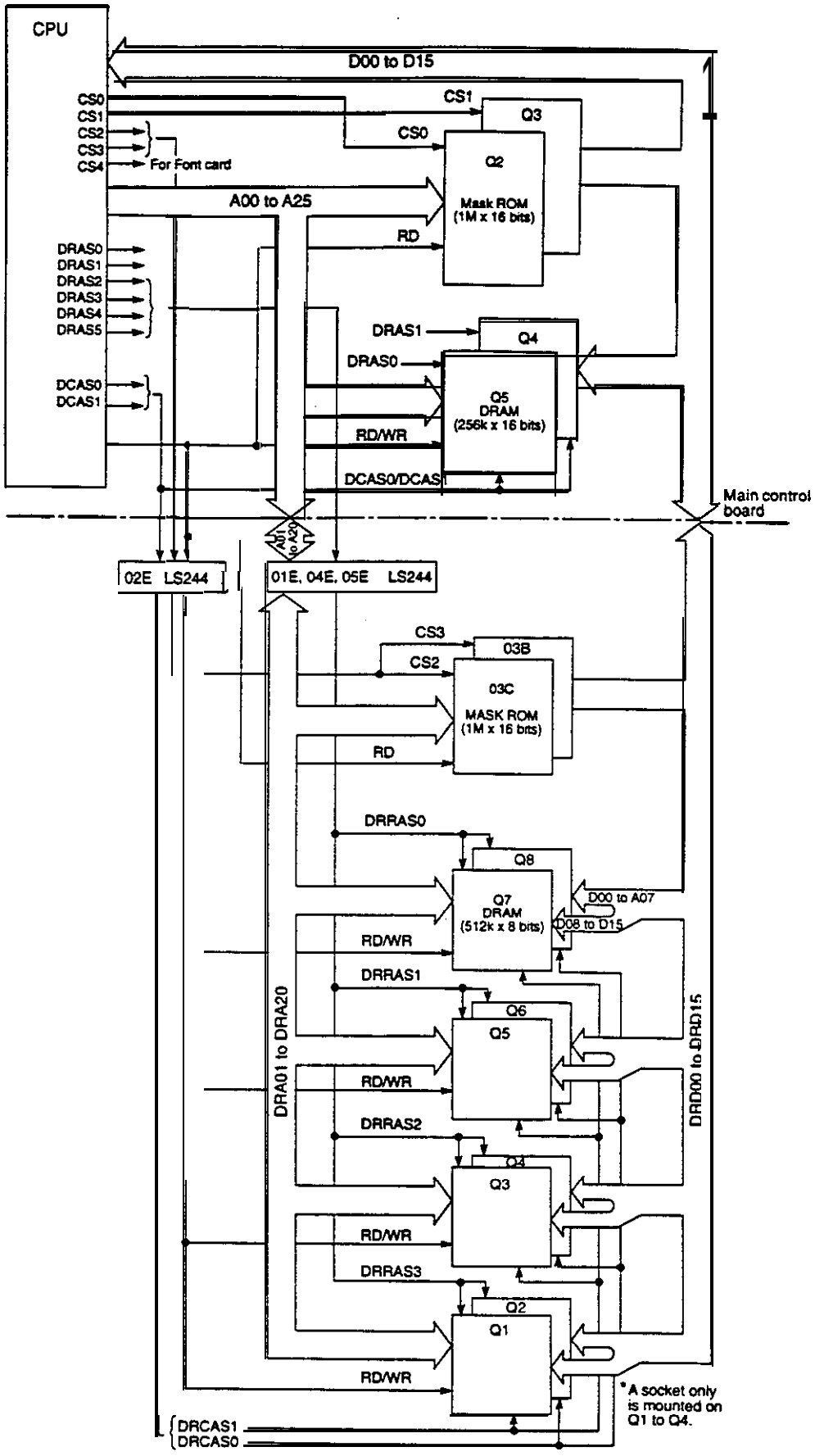


Figure 3-9 Block Diagram of CPU & Memory in OL410e/OL410ex with PS Board

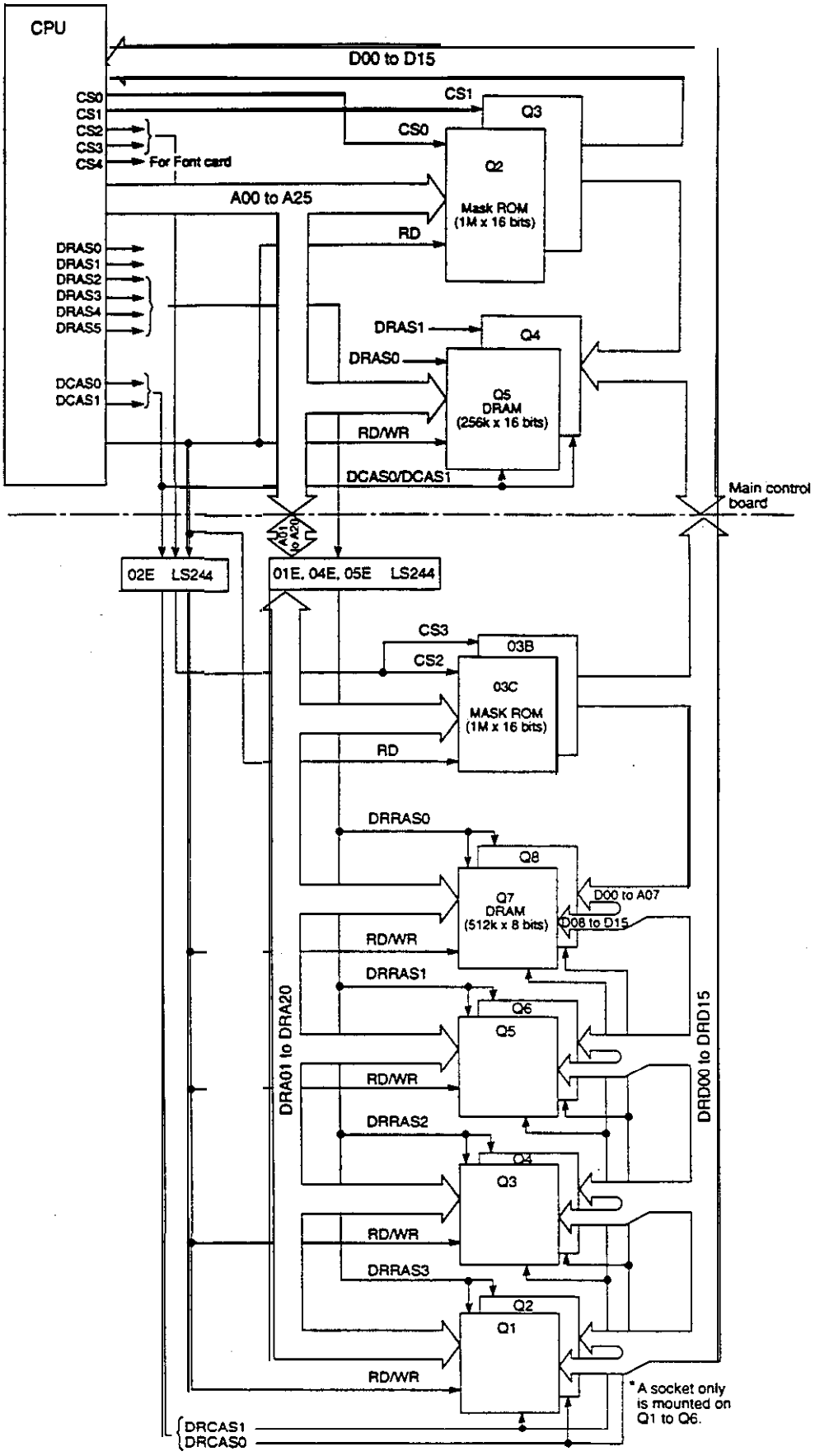
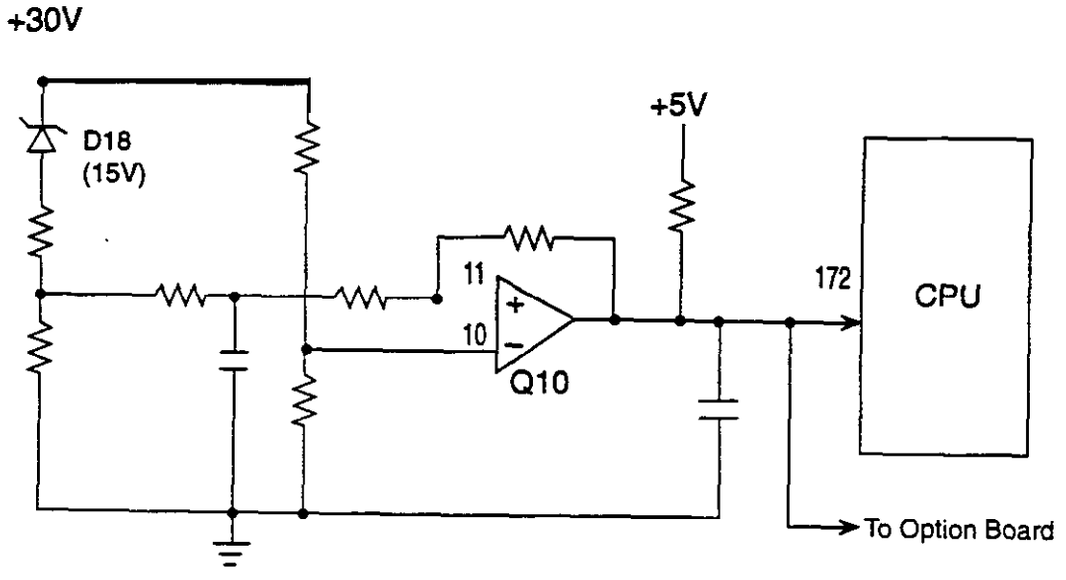
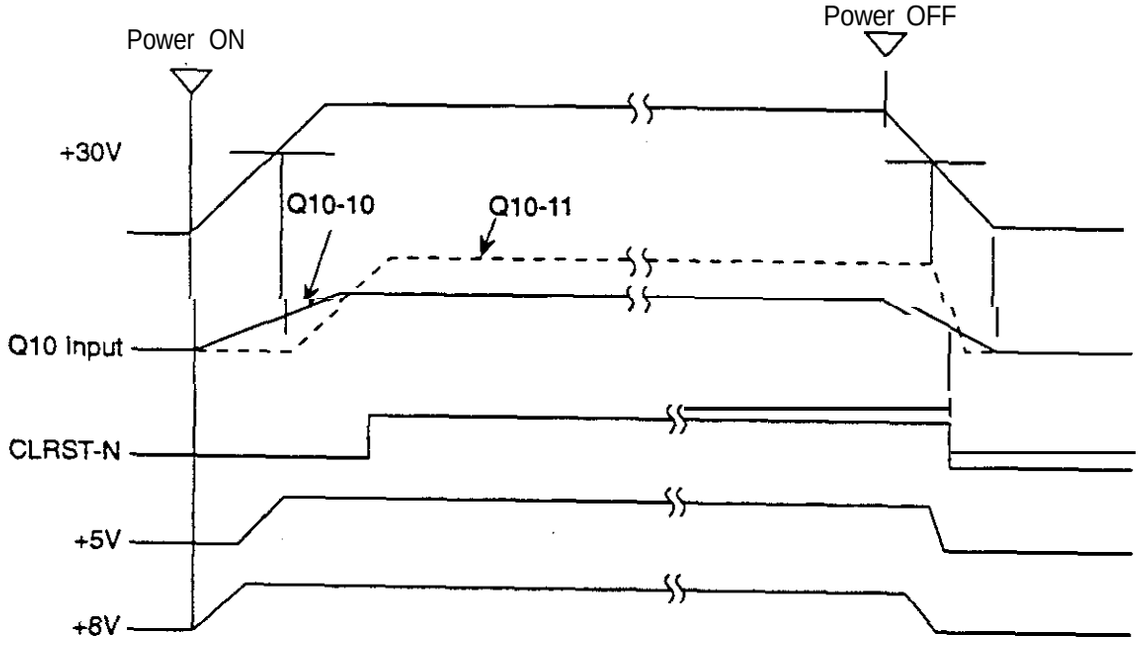


Figure 3-10 Block Diagram of CPU & Memory in OL410ePS

3.3 Reset Control

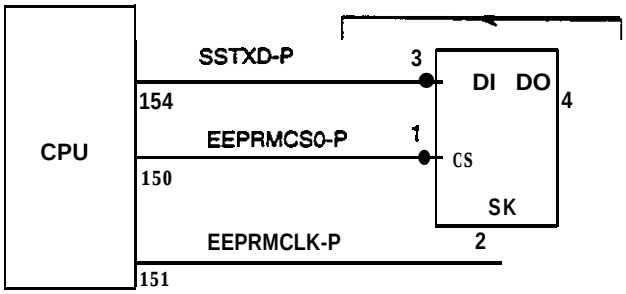
When power is turned on, a CLRST-N signal is generated by the rising sequence of +30V power supply.





3.4 EEPROM Control

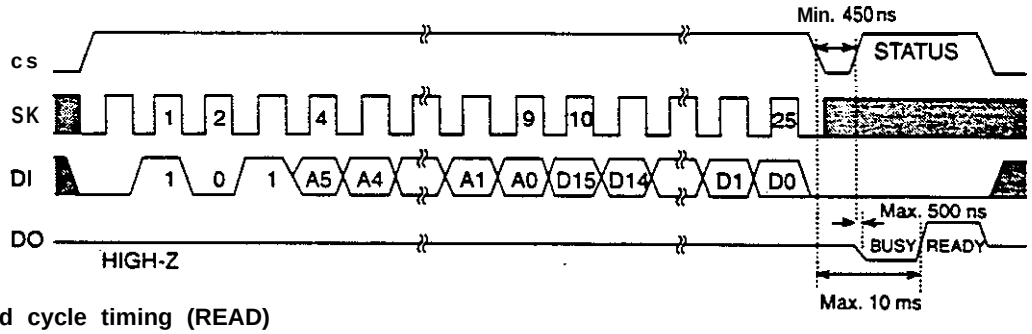
The BR93LC46A on the main control board is an electrical erasable/programmable ROM of 64-bit x 16-bit configuration. Data input to and output from the ROM are bidirectionally transferred in units of 16 bits through a serial I/O port (SSTXD-P) in serial transmission synchronized with a clock signal from the CPU.



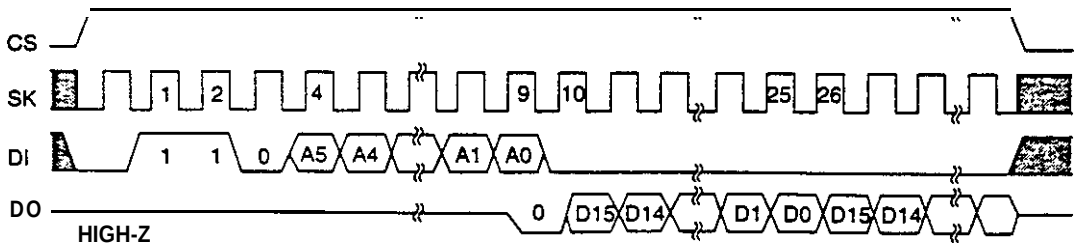
The EEPROM operates in the following instruction modes

instruction	Start bii	Operation code	Address	Data
Read (READ)	1	10	A5 to A0	
Write Enabled (WEN)	1	00	11xXxX	
Write (WRITE)	1	01	A5 lo A0	D15 to DO
Write All Address (WRAL)	1	00	01XXXX	D15 to DO
Write Disabled (WDS)	1	00	ooxxxx	
Erase	1	11	A5 to A0	
Chip Erasable (ERAL)	1	00	1 oxxxx	

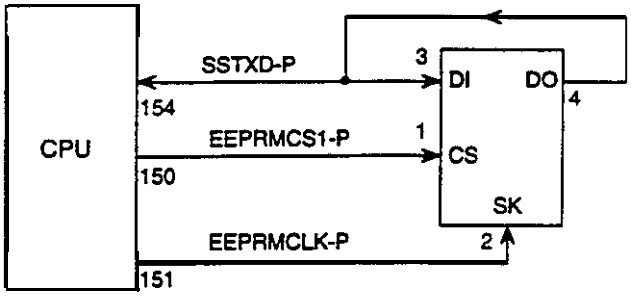
Write cycle timing (WRITE)



Read cycle timing (READ)



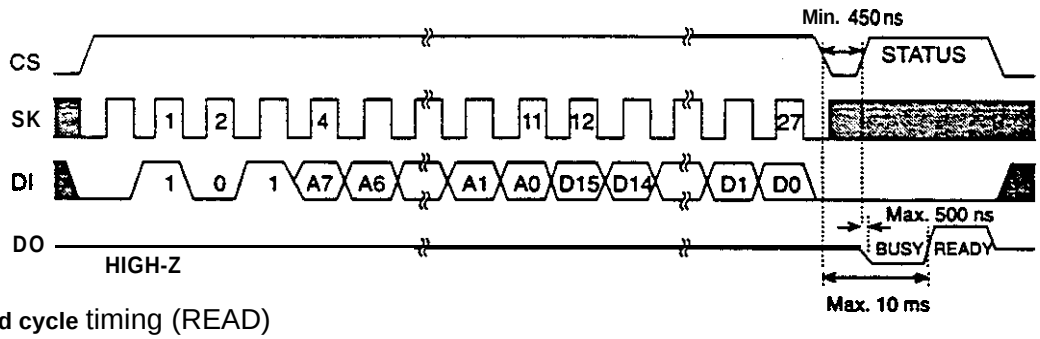
The NM93C66N on the PostScript board is an electrical erasable/programmable ROM of 256-bit x 16-bit configuration. Data input to and output from the ROM are bidirectionally transferred in units of 16 bii through a serial I/O port (SSTXD-P) in serial transmission synchronized with a clock signal from the CPU.



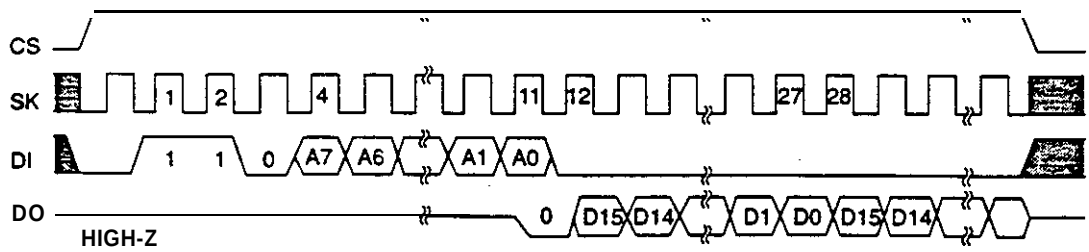
The EEPROM operates in the following instruction modes

Instruction	Start bit	Operation code	Address	Data
Read (READ)	1	10	A7 to A0	
Write Enabled (WEN)	1	00	llxxxxxx	
Write (WRITE)	1	01	A7 to A0	D15 to DO
Write All Address (WRAL)	1	00	oixxxxxx	D15 to DO
Write Disabled (WDS)	1	00	ooxxxxxx	
Erase	1	11	A7 to A0	
Chip Erasable (ERAL)	1	00	loxxxxxx	

Write cycle **timing (WRITE)**

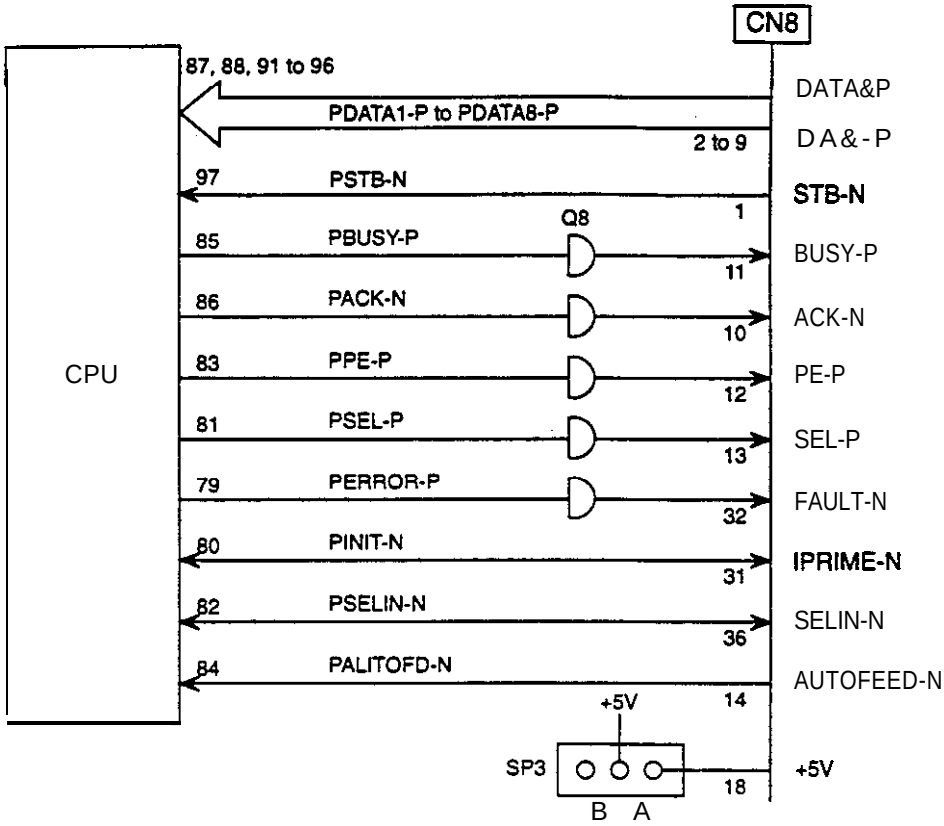


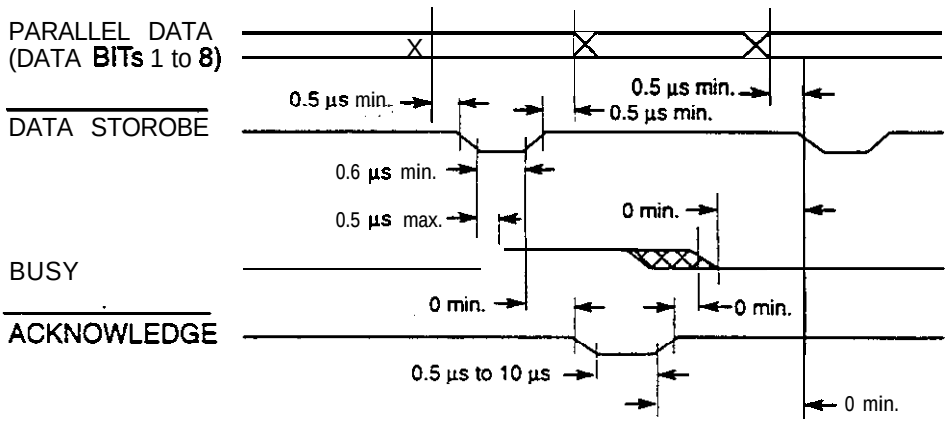
Read cycle timing (READ)



3.5 Centronics Parallel interface

The CPU sets a BUSY-P signal to ON at the same time when it reads the parallel data (PDATA1-P to PDATA 8-P) from the parallel port at the fall of PSTB-N signal. Furthermore, it makes the store processing of received data into a receive buffer terminate within a certain fixed time and outputs an ACK-N signal, setting the BUSY-P signal to OFF.

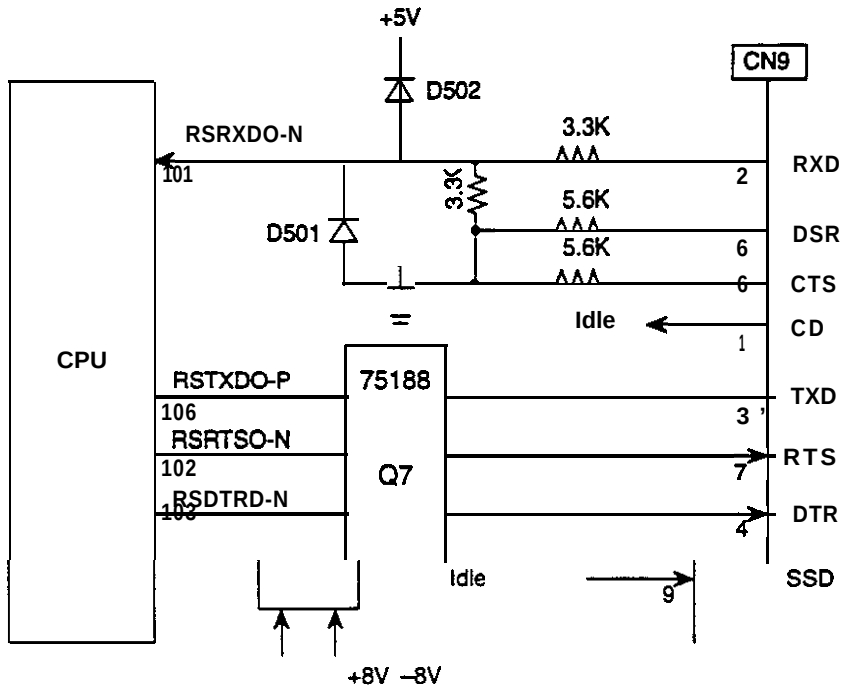




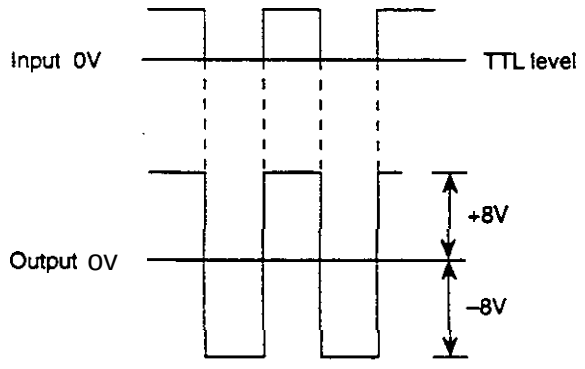
3.6 RS232C Interface

The serial data RXD from the host system, whose line voltage is clamped at the TTL level by D501/ D502, are received by the CPU built-in serial controller.

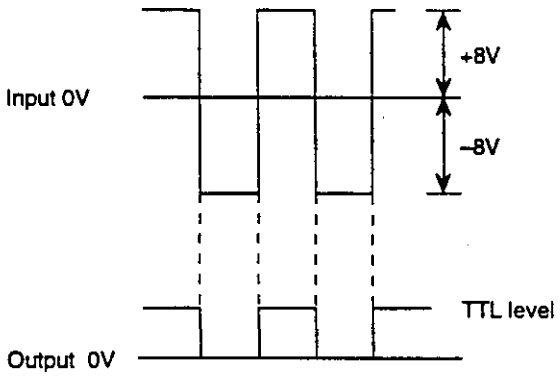
DSR and CTS signals are terminated through 5.6 kilohm resistors. Send signals TXD, RTS and DTR are put out from the CPU and are sent to lines through a line driver IC (Q7).



(1) Send signal level

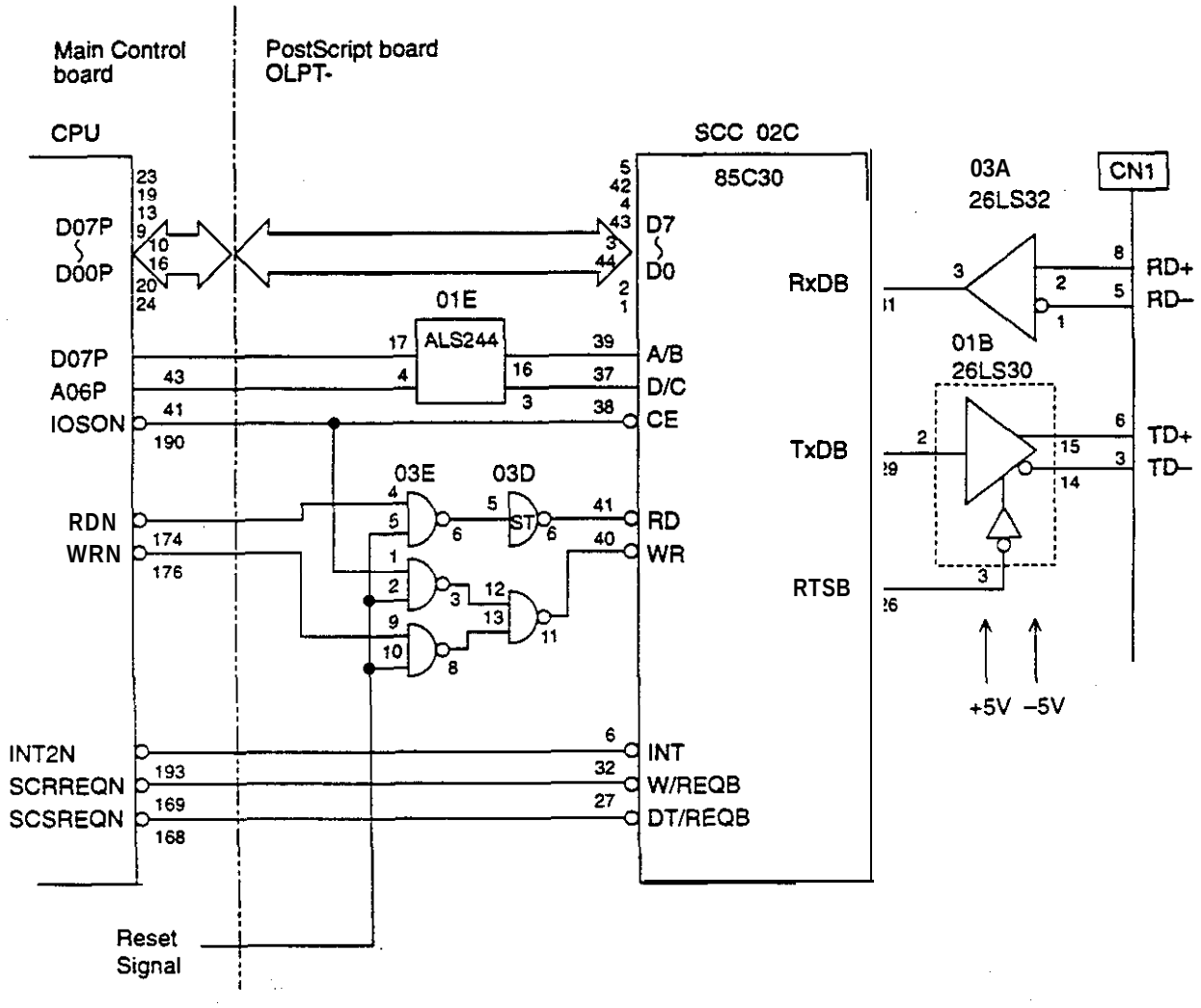


(2) Receive signal level

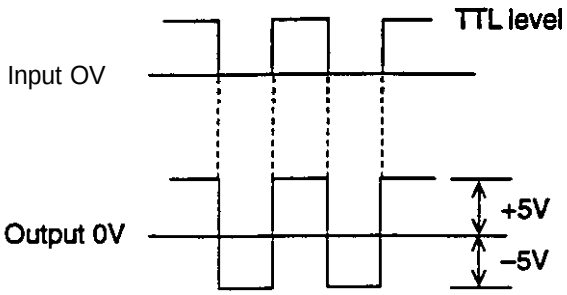


3.7 LocalTalk (RS-422) Interface

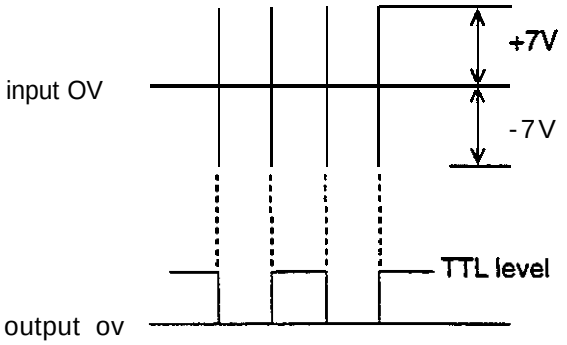
A balanced digital data transmission technology is used in this interface for the long distance serial data transmission. The balanced input signal (RD+ and RD–) is converted to TTL level signal by receiver IC(26LS32), then is read and de-serialized by SCC(85C30), and finally is read as 8-bit parallel data by CPU. The 8-bit parallel output data is written to SCC by CPU first, then the SCC serializes it and outputs it as TTL level serial signal, and driver IC(27LS30) converts it to balanced output signal (TD+ and TD–).



(1) Transmit signal level (26LS30)



(2) Receive signal level (26LS32)



The wave form depends on the protocol. In RS-422 protocol, it is same as RS-232C protocol except that it does not have ready/busy control signal tine.

In LocalTalk protocol, SDLC protocol is used to transmit and receive the data. Fig. 3-11 shows an example of the one SDLC output frame. RTSB signal is used to isolate the output signal line from the LocalTalk network when it is not used.

Fig. 3-12 shows the data transmission/reception between CPU and SCC.

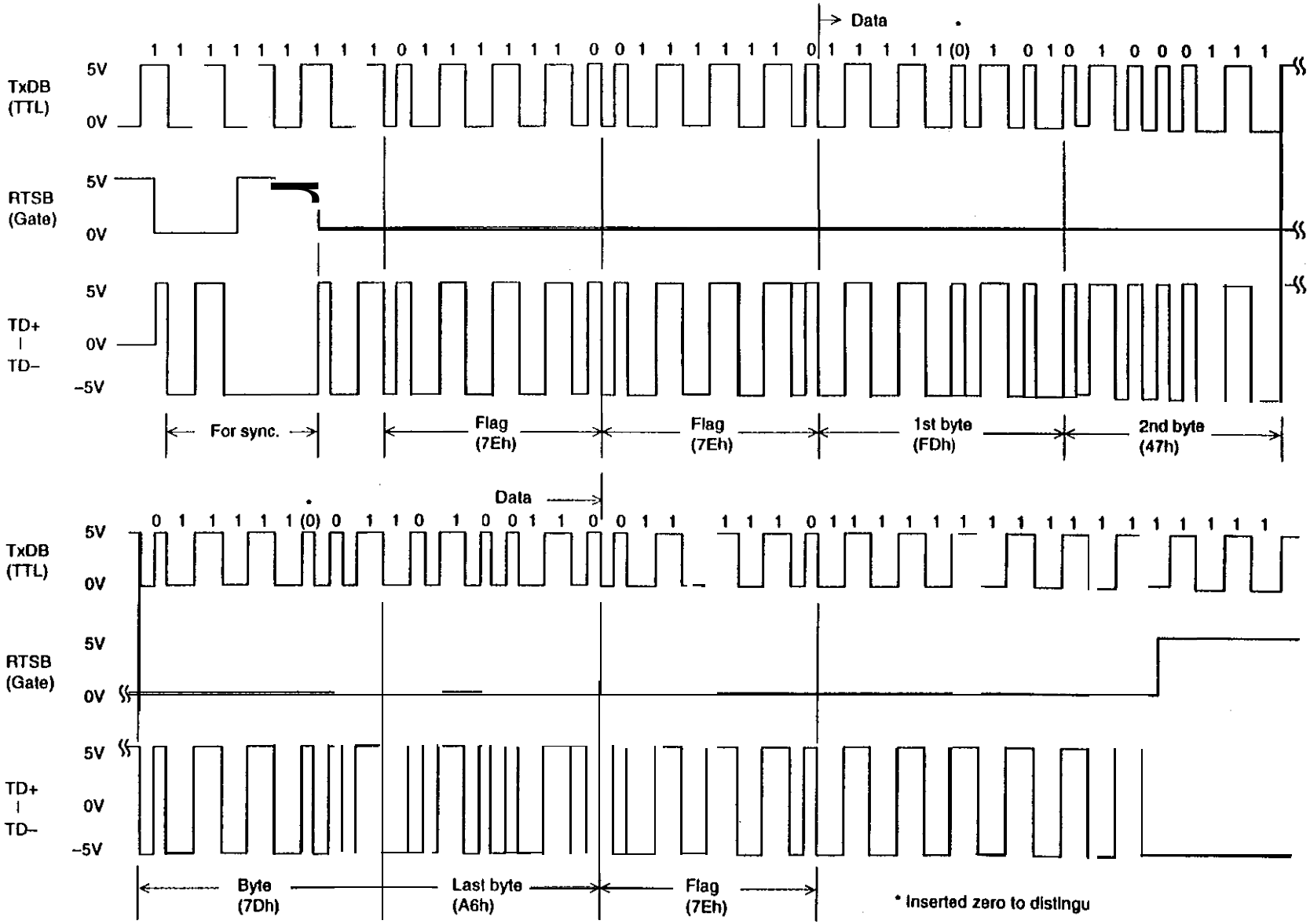
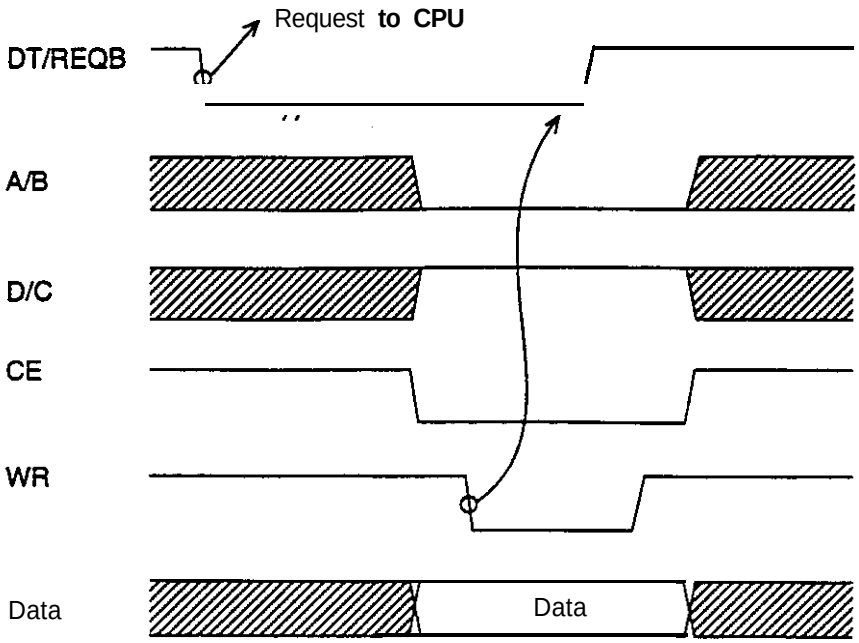


Figure 3-11 SDLC frame

(1) CPU → SCC Data write



(2) SCC → CPU Data read

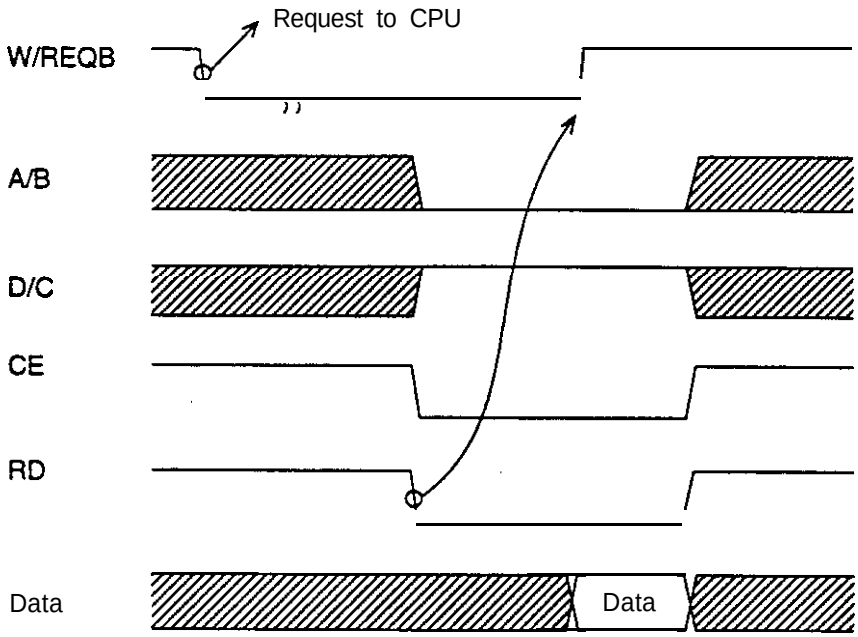
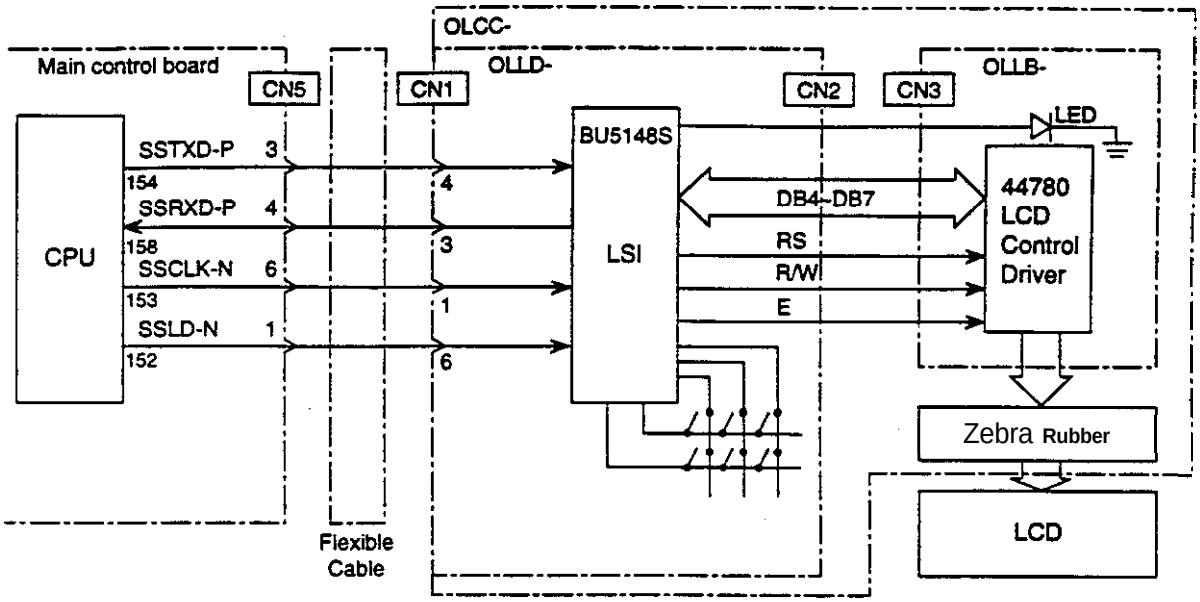


Figure 3-12 Data Transmission/Reception between CPU and SCC

3.8 Operator Panel Control

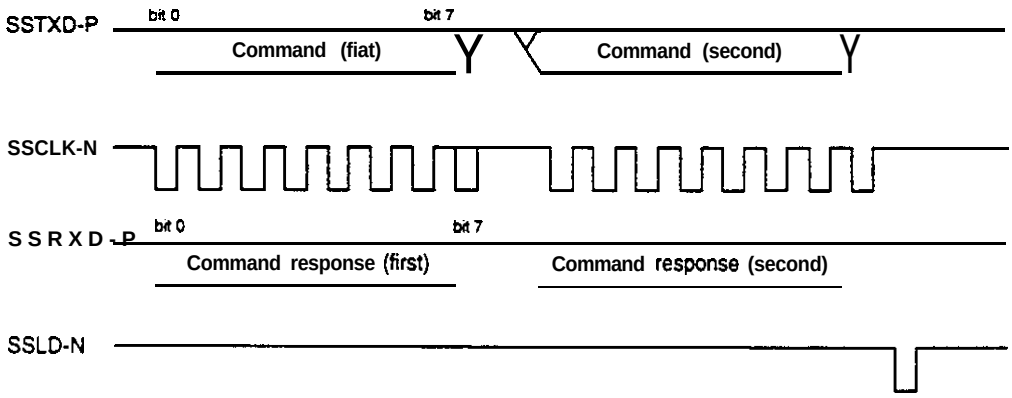
The operator panel consists of the following circuits.



1) BU5148S (LSI)

This LSI is connected to a clock synchronous serial port of the CPU. It controls switch data input, LED data output and LCD data input/output according to the commands given by the CPU. The CPU sends the 2-byte (16-bit) command (SSTXD-P) together with the shift clock signal (SSCLK-N) to the LSI and then makes a predetenined input/output control if the command decoded by the LSI is found to be a normal command.

On receiving a command sent from the CPU, the LSI. synchronizing with the serial clock of the command, returns a 2-byte command response to the CPU.

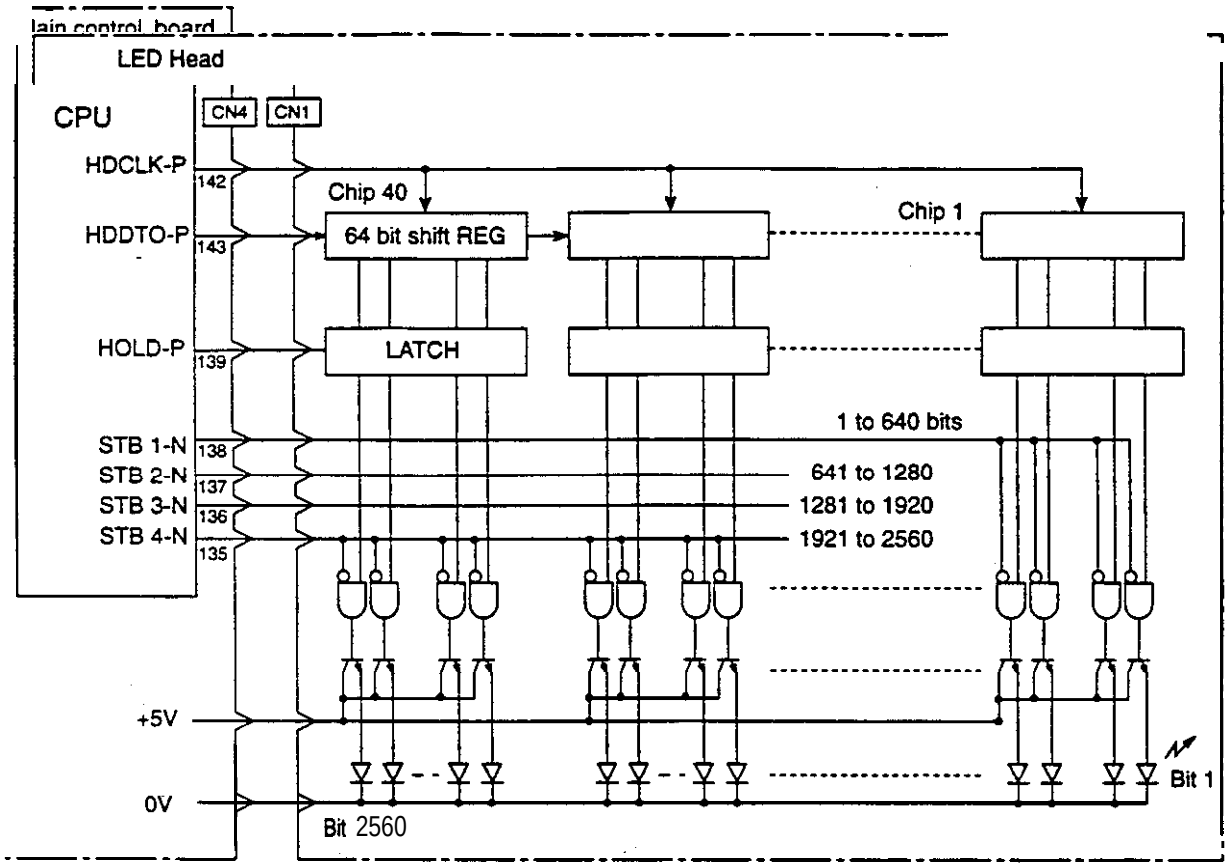


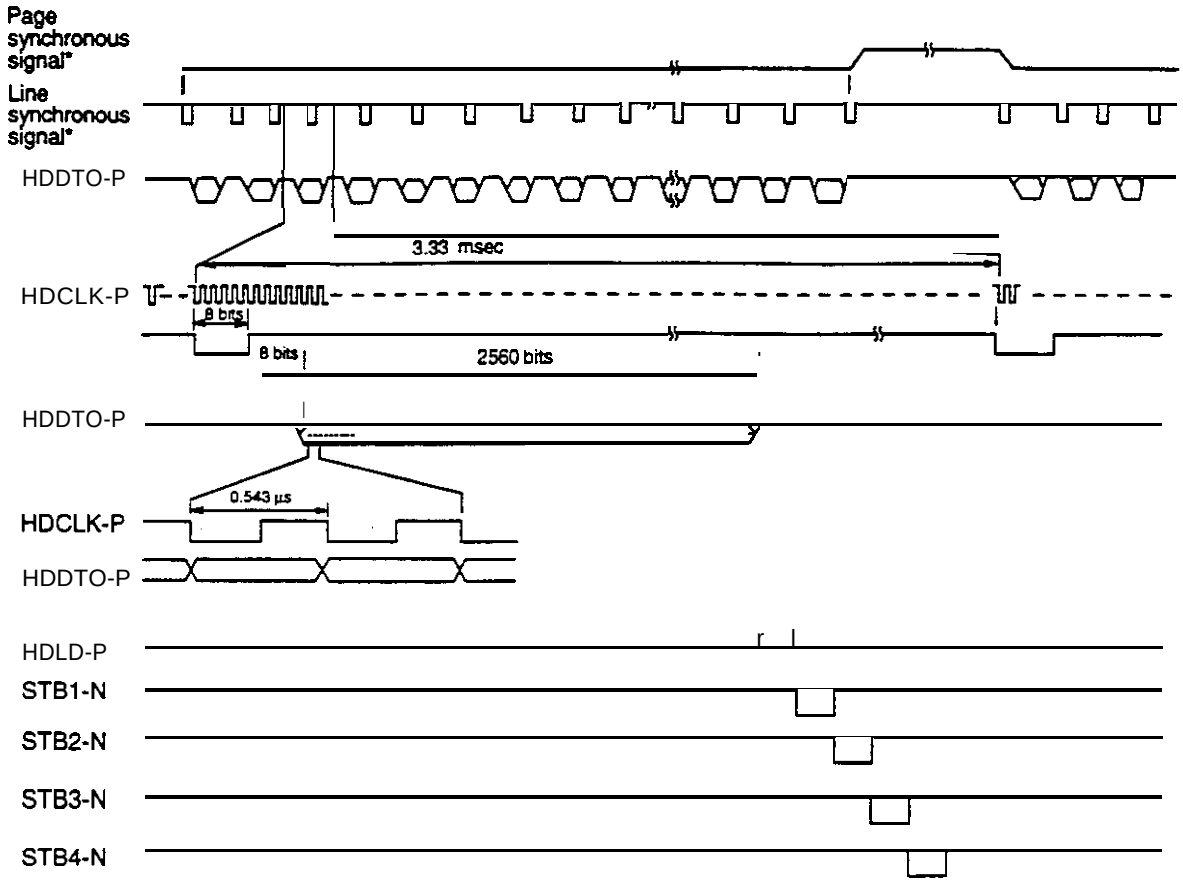
3.9 LED Head Control

When a paper form is made to arrive at the data **write** position on print start, the sending of data to the LED head starts as synchronized with the page synchronous **signal/line** synchronous signal (CPU internal signal).

Bit image data developed on the raster buffer of a memory are DMA-transferred to the register of a video interface controller (CPU built-in) and then sent to the shii register of the LED head in a serial transmission synchronized with the HDCLK-P signal by the **HDDTO-P** signal.

When l-dot line data (2560 bii) is completely shifted, it is latched by means of the HDLD-P signal, causing **LEDs** to be driven by means of the **STB1-N** to **STB4-N** signals in **4-time** division.

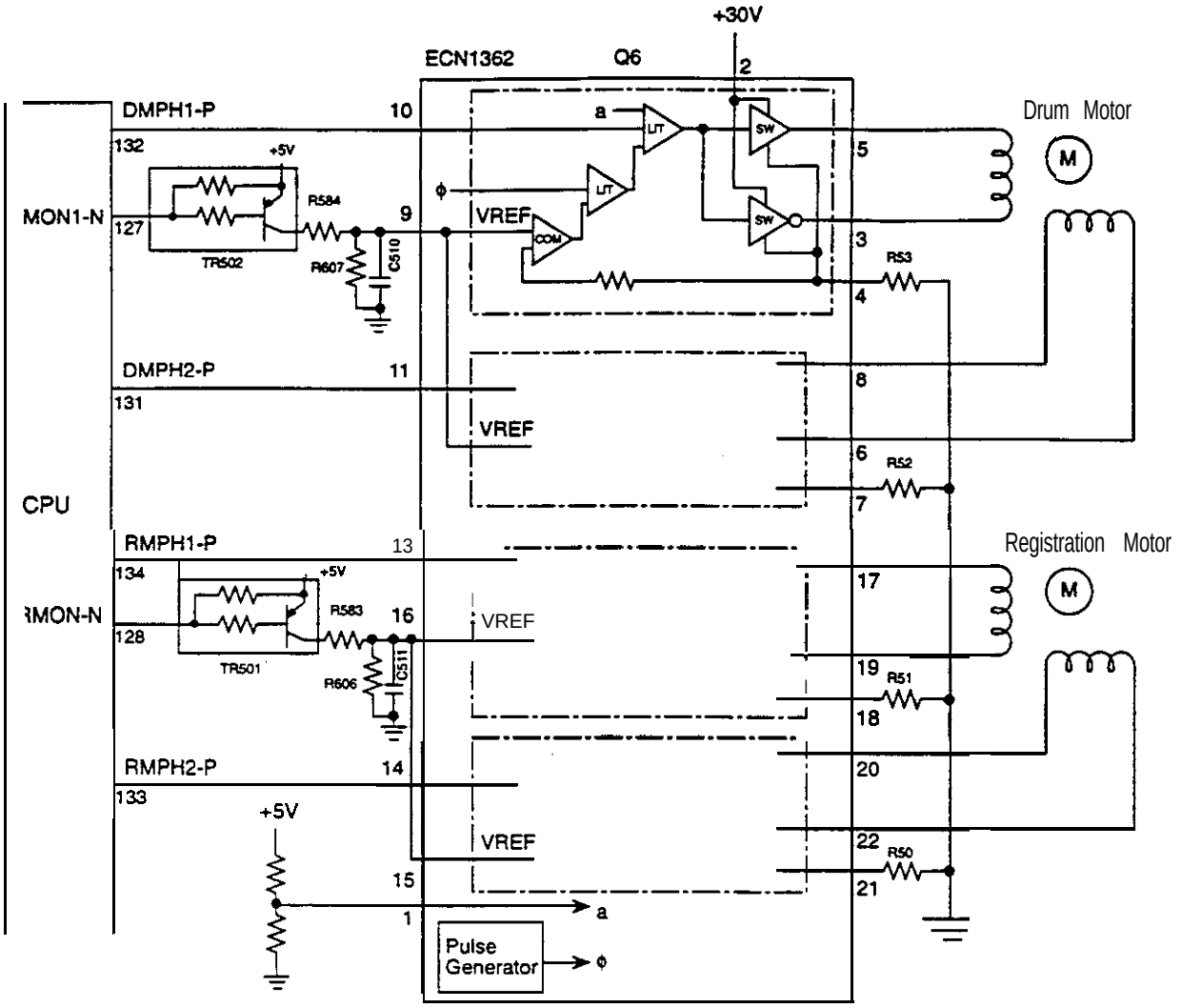




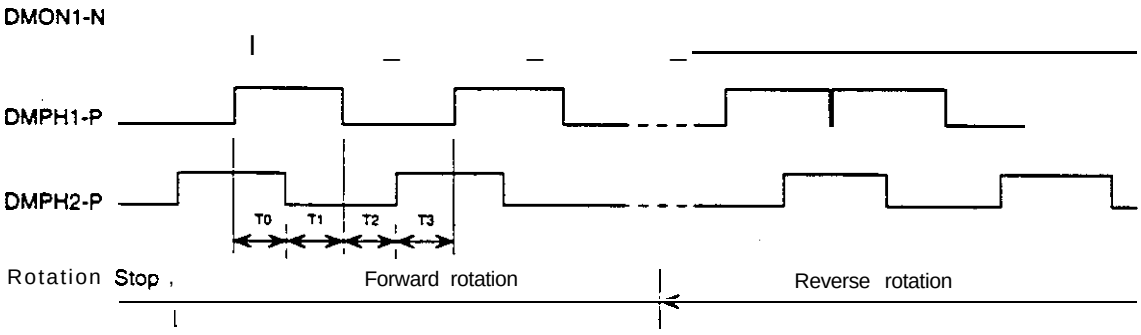
* CPU internal signal

3.10 Motor Control

A registration motor and a drum motor are driven by means of control signals from the CPU and a driver IC.

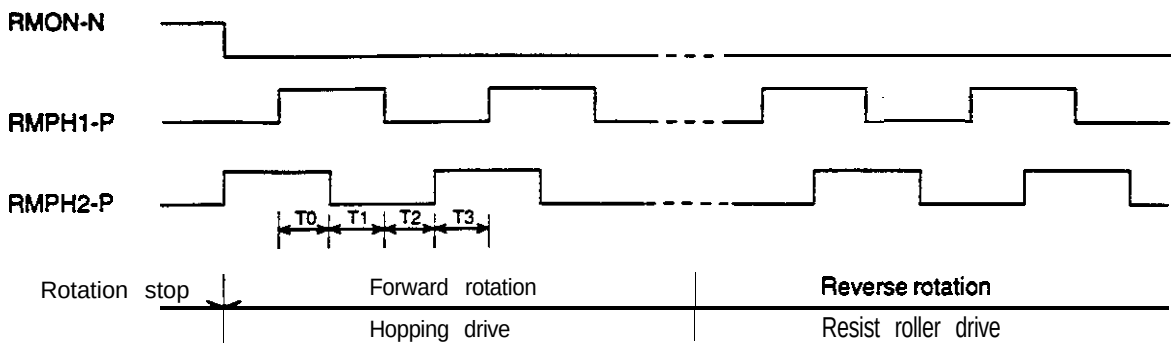


(1) Drum motor



Operation at normal speed: TO to T3 = 1.667 ms

(2) Registration motor



Operation at normal speed: TO to T3 = 1.667 ms

(3) Drive control

Time TO to T3 determines the motor speed, while the phase different direction between phase signals DMPH1-P and DMPH2-P (RMPH1-P and RMHPH2-P) determines the rotation direction, DMON1-N and RMON-N signals control a motor coil current. According to the polarity of the phase signal, the coil current flow as follows:

1) +30V → SW → motor coil → $\overline{SW}$ → resistor → earth, or,

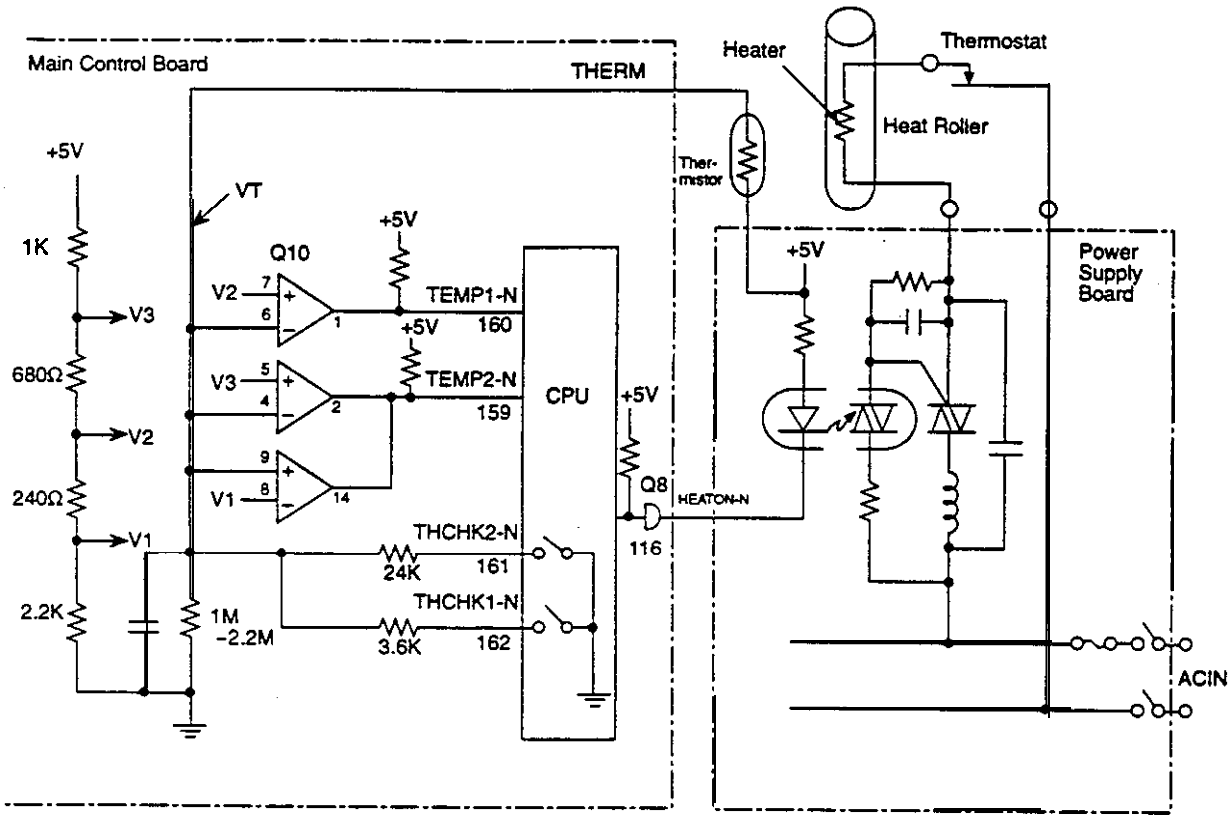
2) +30V → $\overline{SW}$ → motor coil → SW → resistor → earth

The drop voltage across the resistor is input to comparator, where it is compared with a reference voltage. If an overcurrent flows. a limiter operates to maintain it within a certain fixed current.

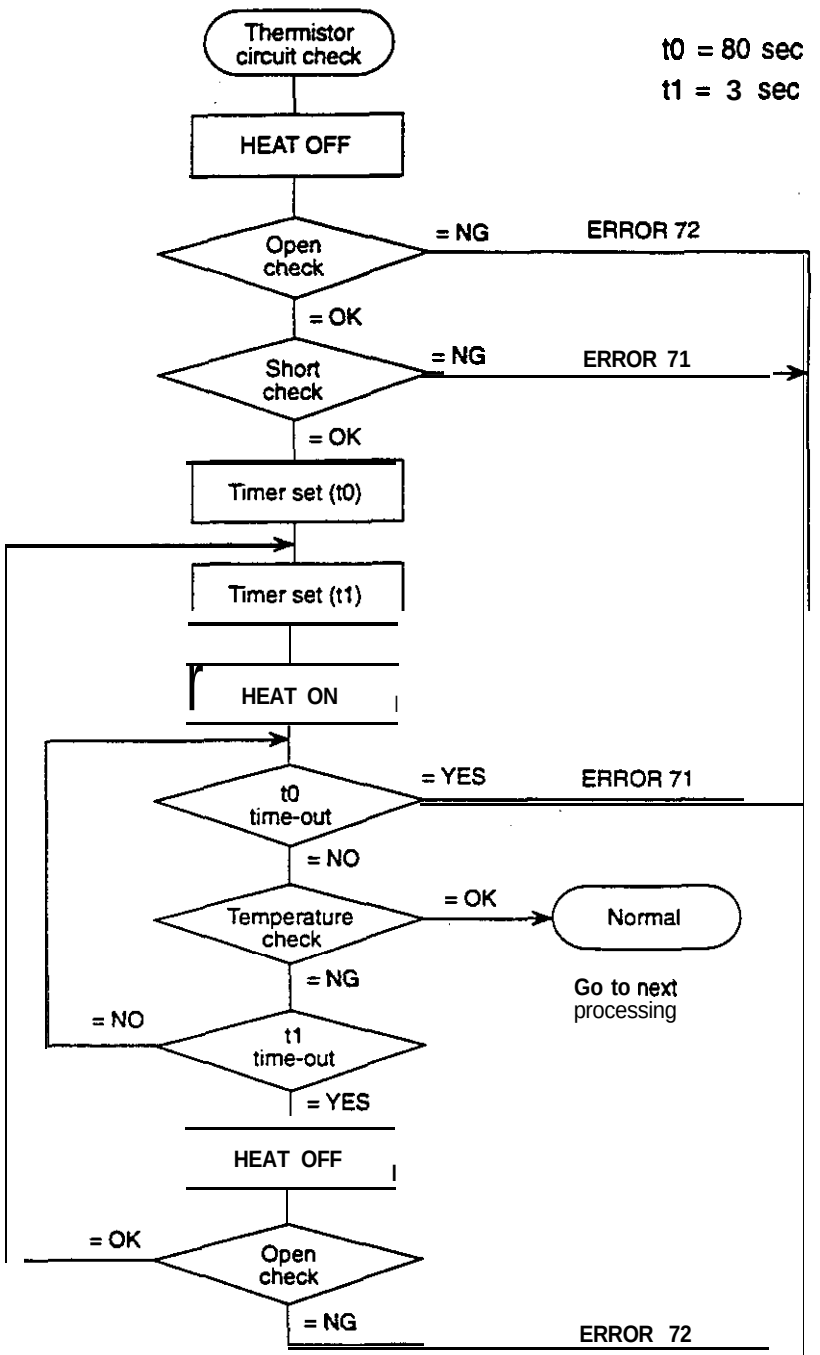
3.11 Fuser Temperature Control

The temperature change in a heat controller is converted into the electric potential VT corresponding to the change in the resistance value of a thermistor, and the resultant potential is fed back to the control circuit. In accordance with the state of output signals TEMP1-N and TEMP2-N from the comparator, the CPU makes a heater on/off by means of a HEATON-N signal to keep the heat roller temperature constant. THCHK1-N and THCHK2-N signals cause the thermistor to be checked for its open/short condition in the warming up state and the temperature level to be switched.

In the case of printing paper forms of A5 size or less in a manual paper feeding mode, the temperature is made to go up to 165°C.

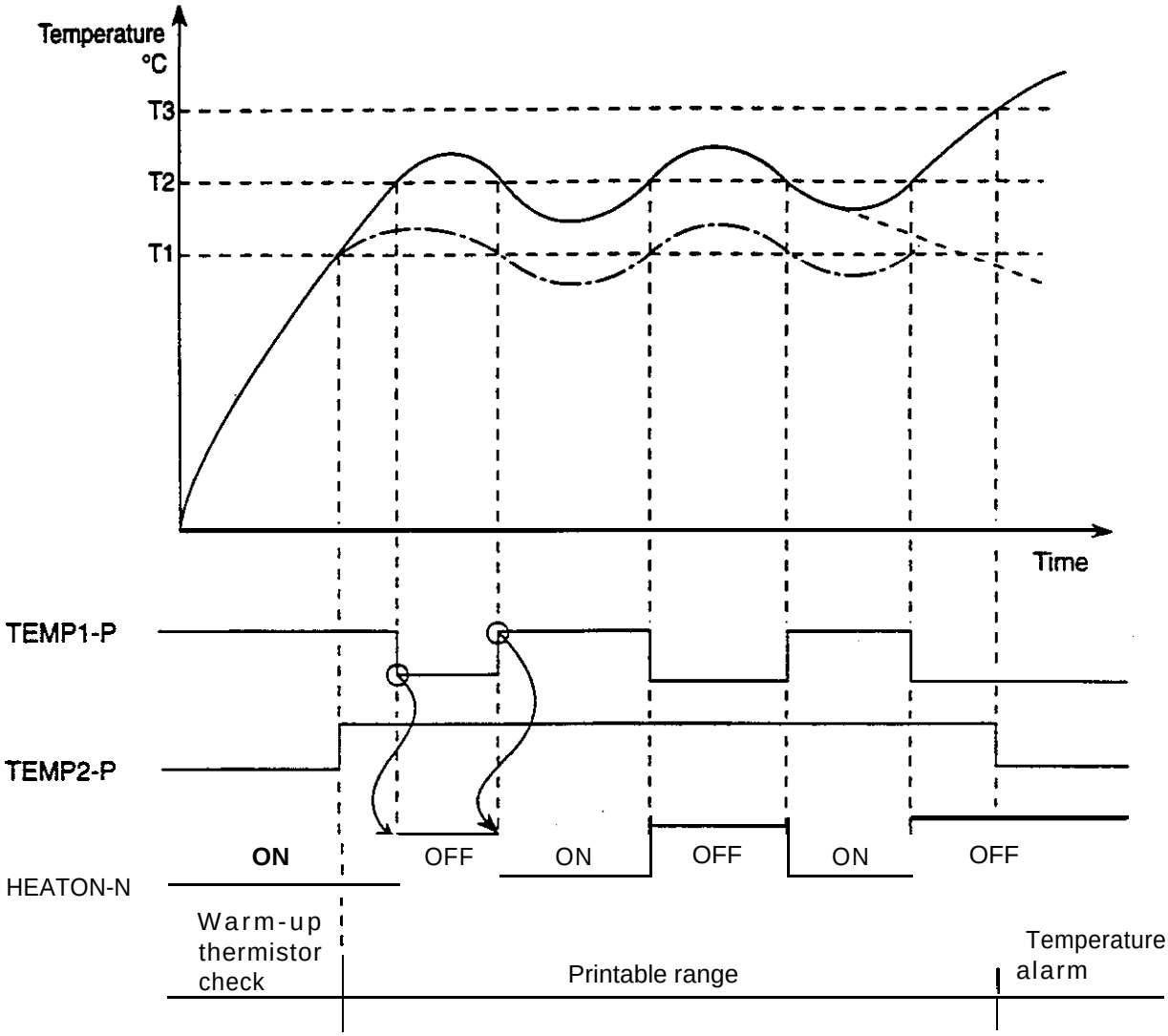


Flowchart of Thermistor Circuit Check



The disconnection check shall be repeated for 3 sec. at intervals of 40 rns.

The short check shall be performed only once at an interval of 40 ms.



Temperature table

THCHK1	THCHK2	T1	T2
0	0	155°C	165°C
0	Z	150°C	160°C
Z	Z	Thermistor open check	

150%: In standby state
155%: During normal paper printing
160%: For 2 minutes after warming up
165°C: During envelope printing

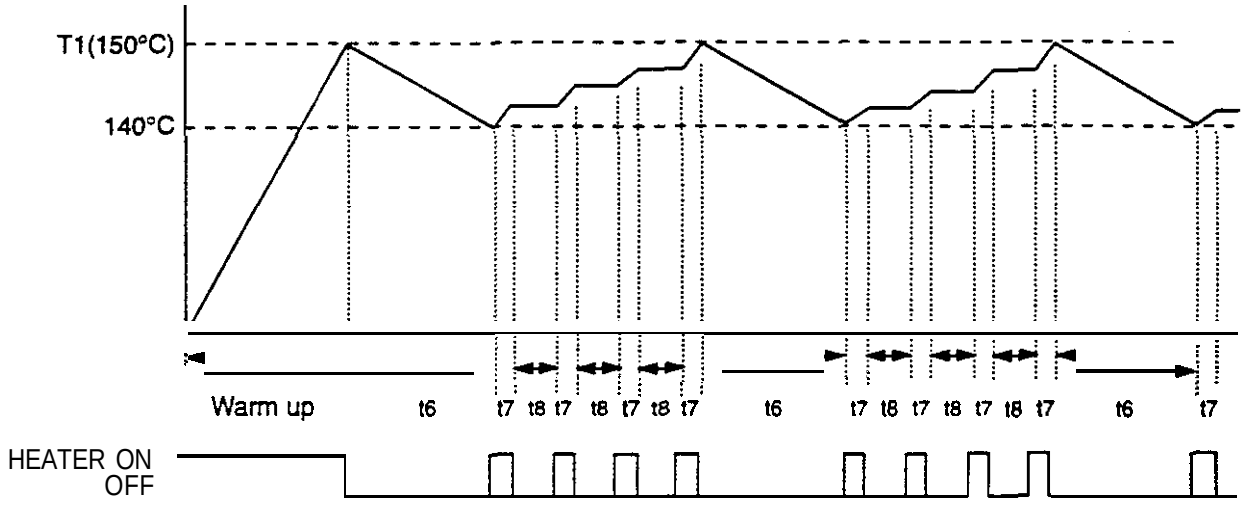
When the paper thickness is set to thin by menu operation. the target temperature is set to 145°C. Since there is no way to directly detect that temperature, the heater on/off control is changed.

The sequence is as follows.

(1) When the temperature reaches 150% the printer turns the heater off for t6 sec., at this point the assumed temperature is 104°C.

(2) Then the printer repeats the heater on and off (on for t7 sec. and off for t8 sec.), until the temperature reaches 150% again.

(3) Go back to (1).



If the thermal environment is the same, the heater is cooled off by drawing the same temp.-time curve. The t6 is obtained by applying this theory.

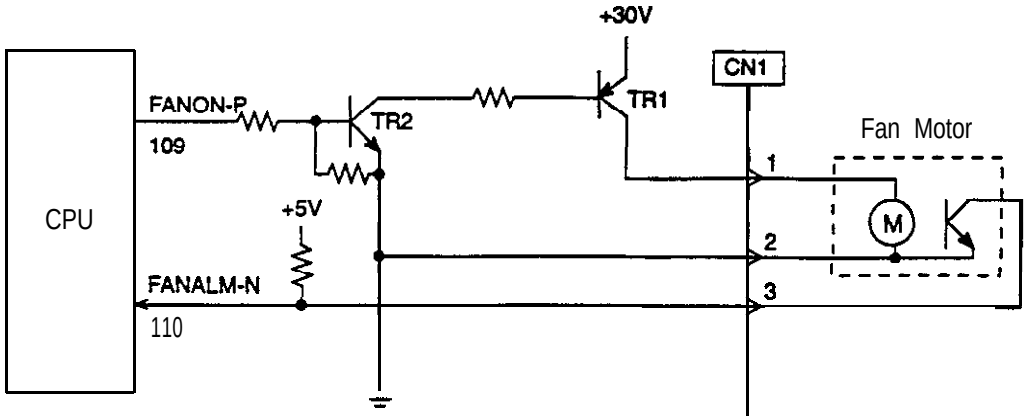
When a paper is fed, the paper carries the heat off from the heat roller quickly. Then two t6 are used.

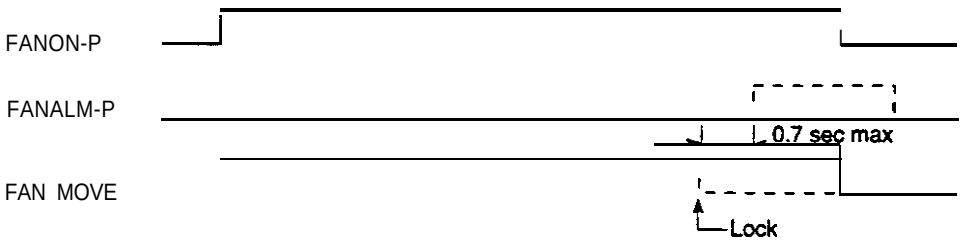
(1) Short t6, when the drum motor is rotating (when the paper is being fed).

(2) Long t6, when the drum motor is not rotating.

3.12 Fan Motor Control

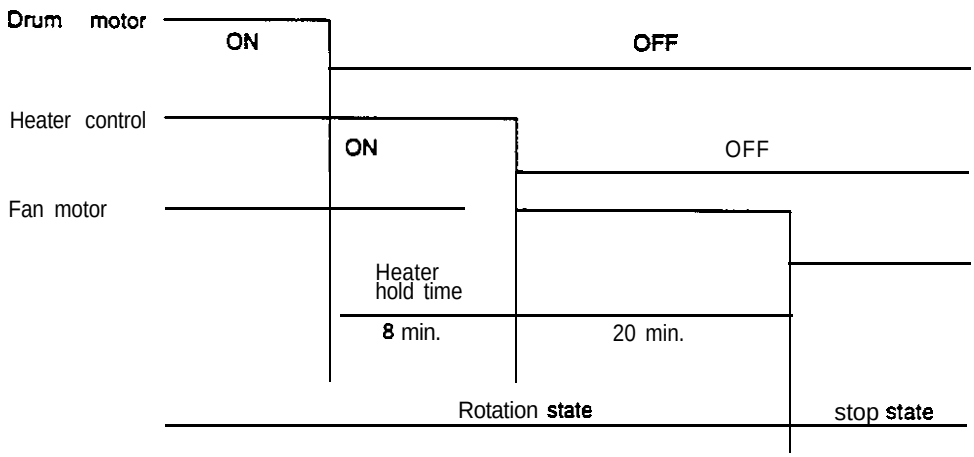
The stop/rotation of the fan motor is controlled by a FANON-P signal. When the fan motor rotates normally. a FANALM-P signal generated in the hole element built in the fan motor is input to the CPU.





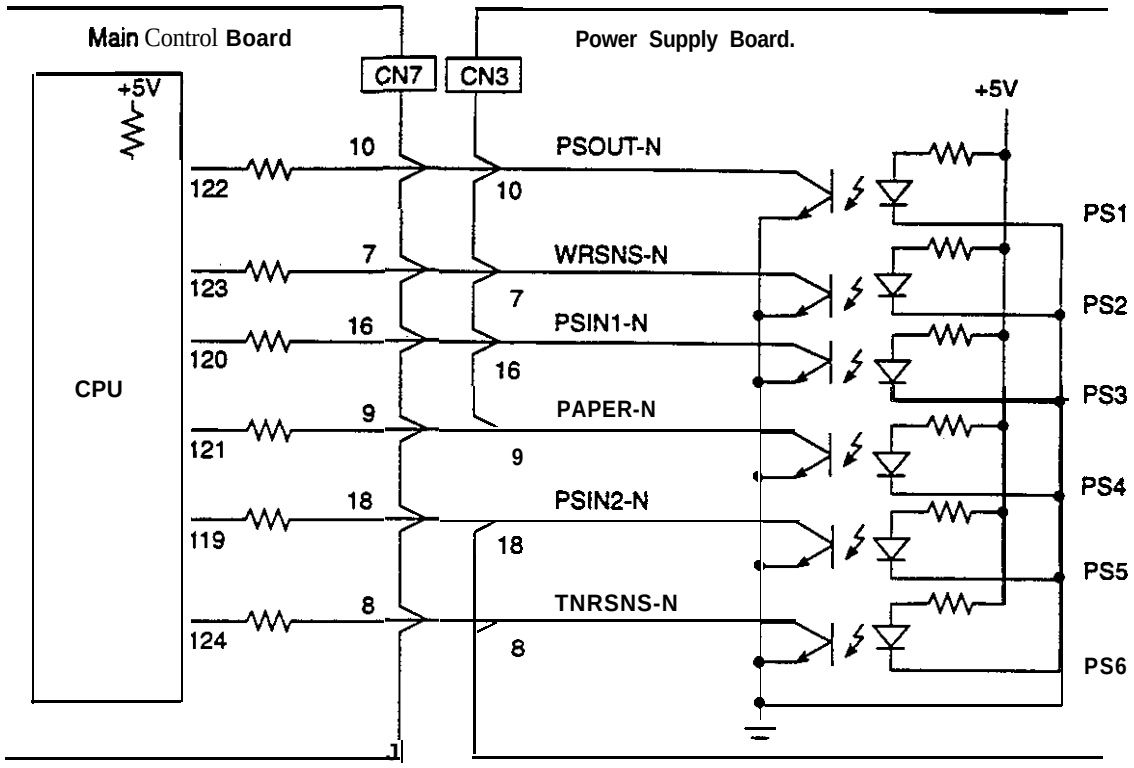
Fan motor start: Initial request, heater on, print start request

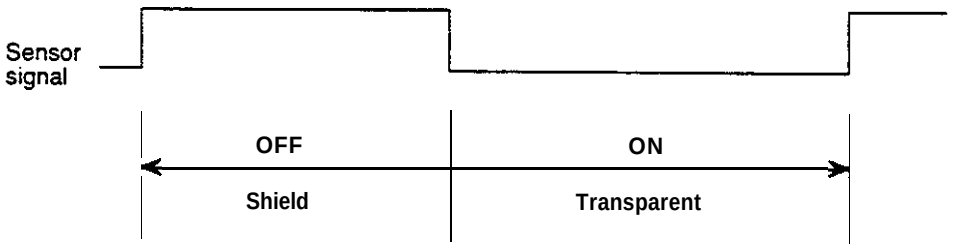
Fan motor stop:
- The motor immediately stops when an engine error or a fan error occurs.
- The motor stops 20 minutes after the occurrence of a paper jam, size error, or fuse error.
- The motor stops in the power save mode as below.



3.13 Sensor Control

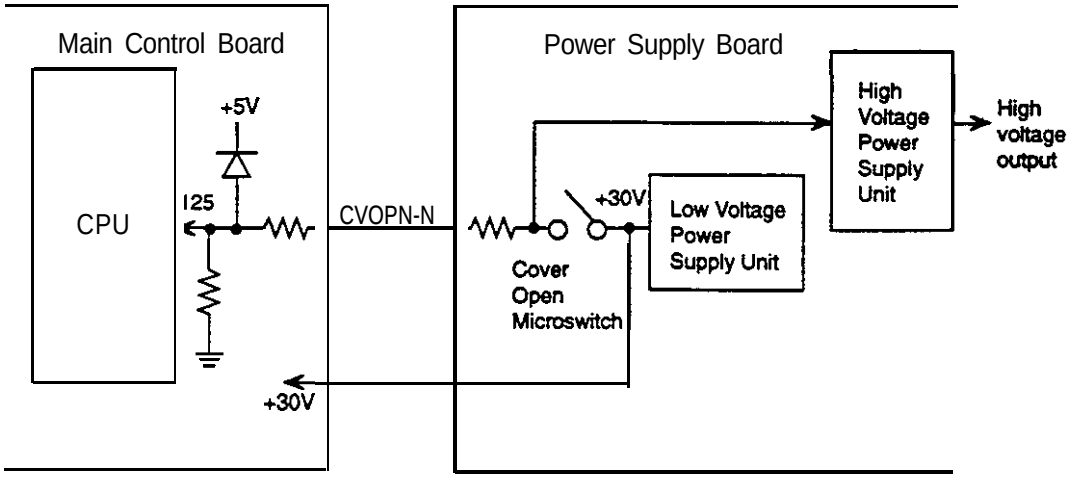
The CPU supervises the state of each sensor every **40** ms.

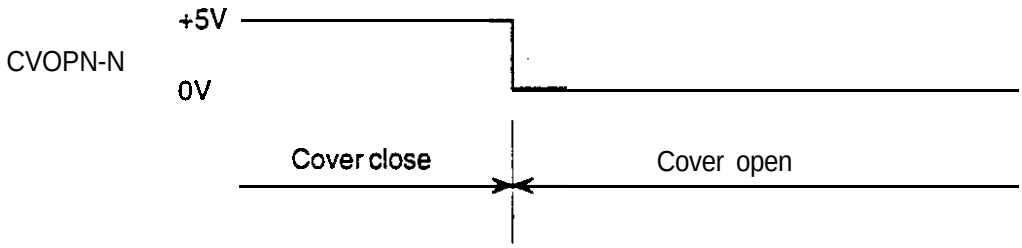




3.14 Cover Open

When the cover is opened, a cover open microswitch is Opened. This makes a CVOPN-N signal low, thereby the CPU detects the open state. Furthermore, opening the cover stops applying a +30V power to the high voltage power supply unit, resulting in stopping all high voltage outputs.

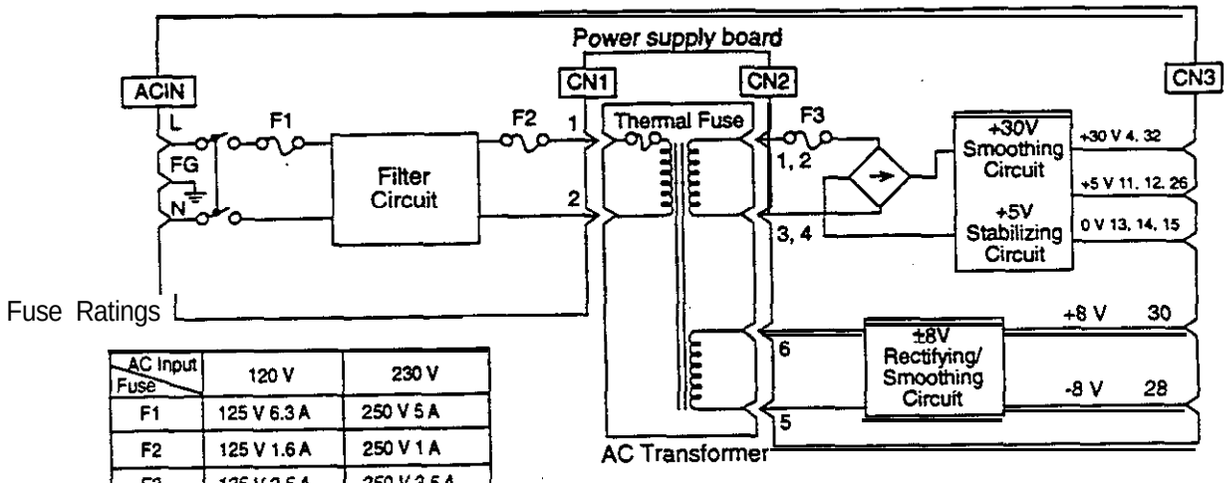




3.15 Power Supply Board

(1) Low voltage power supply

An AC power from an inlet is input to a transformer via fuses, AC switch and noise filter and then lowered to a 28 VAC power and a 10 VAC power. The 28 VAC power is converted to a +30 VDC output through a rectifying/smoothing circuit. A +5 VDC output is derived from the resultant +30 VDC power through a regulation circuit. The 10 VAC power is converted to a +8 VDC output and a -8 VDC output through a rectifying/smoothing circuit.

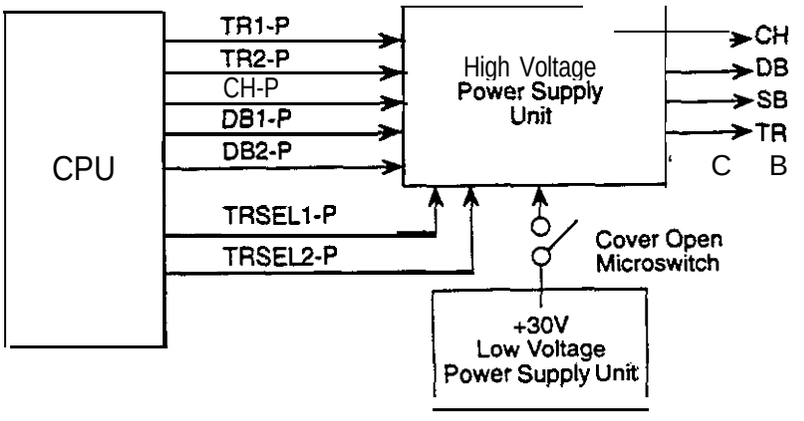


Fuse Ratings

AC Input / Fuse	120 V	230 V
F1	125 V 6.3 A	250 V 5 A
F2	125 V 1.6 A	250 V 1 A
F3	125 V 2.5 A	250 V 2.5 A

(2) High voltage power supply

The +30 VDC power supplied to the high voltage power supply unit via the cover open microswitch as source voltage. The high voltage power supply unit supplies necessary voltage for electrophotography print to output terminals CH. DB, SB, TR, and CB according to a control signal from the CPU. The table on the next page shows the relationship between control signals and high voltage outputs.



Control Signals and High Voltage Outputs

Control signal name	Level	Function
TRSEL1-P	Fixed to H	———
TRSEL2-P	H	Makes the unit operate in a constant current control mode.
	L	Makes the unit operate in a constant voltage control mode.
TR1-P	H	Makes the unit put out a powe(+3 to 6 μA / +0.5 to 4 Kv) to TR.
	L	———
TR2-P	H	Makes the unit put out a -750V power to TR.
	L	———
CH-P	H	Makes the unit put out a -1.35 KV power to CH.
	L	———
DB1-P	H	Makes the unit put out the following power: +450V or OV power to SB +300V power to DB
	L	———
DB2-P	H	Makes the unit put out the following power: -450V power to SB -300V power to DB +400V power to CB
	L	———

3.16 Option Tray Control

Two kinds of option trays, Second Tray and Multi purpose Feeder, can be connected to the printer individually or at same time by daisy chain. The trays are distinguished by two digit ID numbers. Fig. 3-13 shows the connection and the block diagrams.

The option trays and the printer communicate with each other through bi-directional clock synchronized serial interface. Fig. 3-14 shows its time chart, the printer always sends a command first, then each option tray interpret it. Because the command contains an ID, the selected option tray takes appropriate actions, then sends back a reply. The command and reply are transmitted back and forth on OPTSD-P signal line by synchronizing OPTSCLK-N clock signal which is sent by the printer. The printer knows the timing when it outputs the clock for the reply by sensing OPTSDR-N signal which is turned to zero by the option tray when it is ready for the reply.

The option tray's paper feeding action is triggered by a command sent by the printer. When the tray detects a signal on OPTPSIN-N signal line, which indicates the paper reaches a input sensor in the printer, the tray stops the paper feeding after carrying out the paper feeding according to the predetermined steps which have been downloaded from the printer at power-up time. Fig. 3-15 shows the time chart.

Status of the option trays such as no paper cassette, paper out and cover open, are informed to the printer though a reply in response to a status inquiry command.

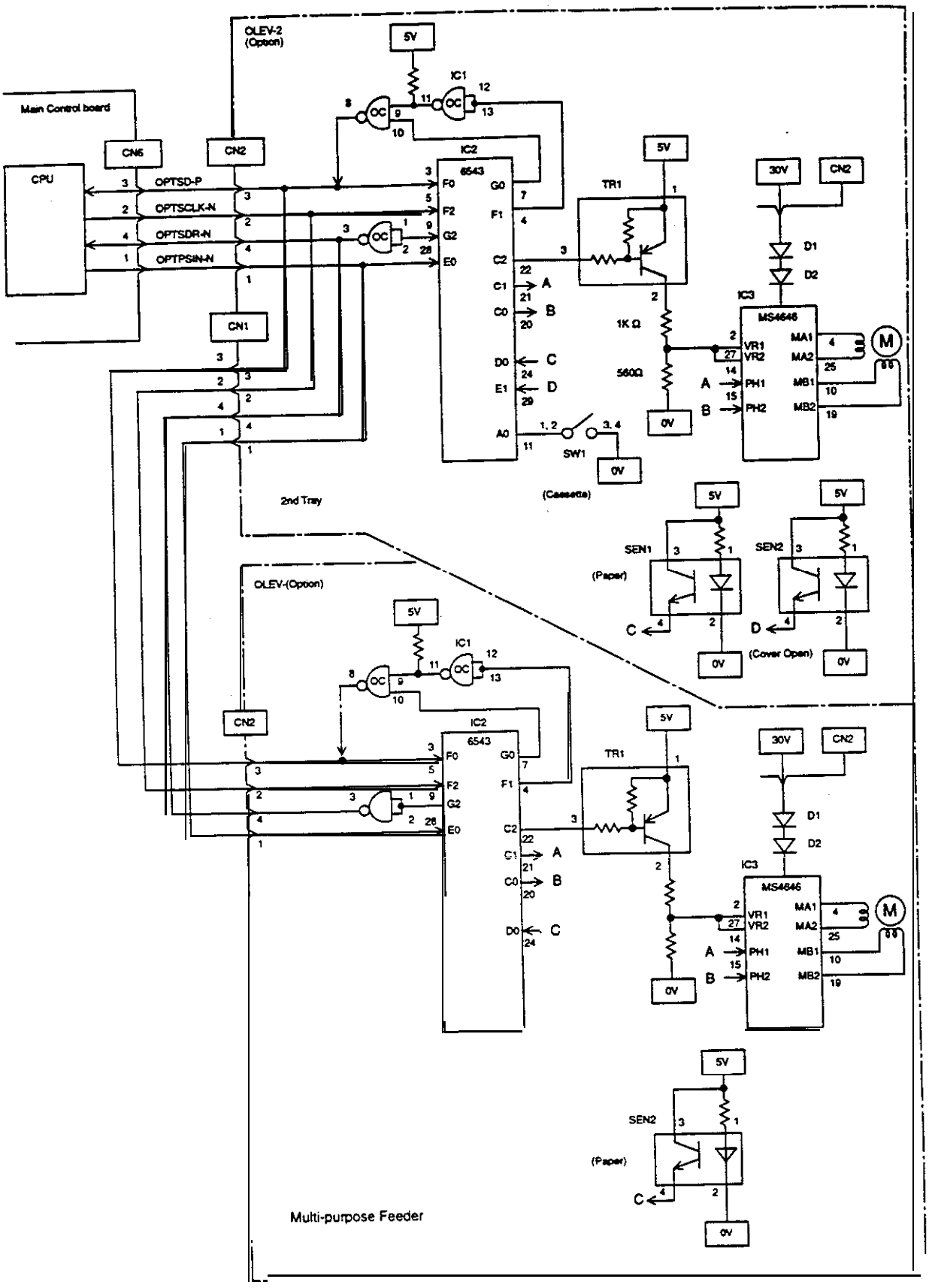


Figure 3-13 Option Tray Connection and Block Diagram

Option Tray Control Serial Interface Time Chart

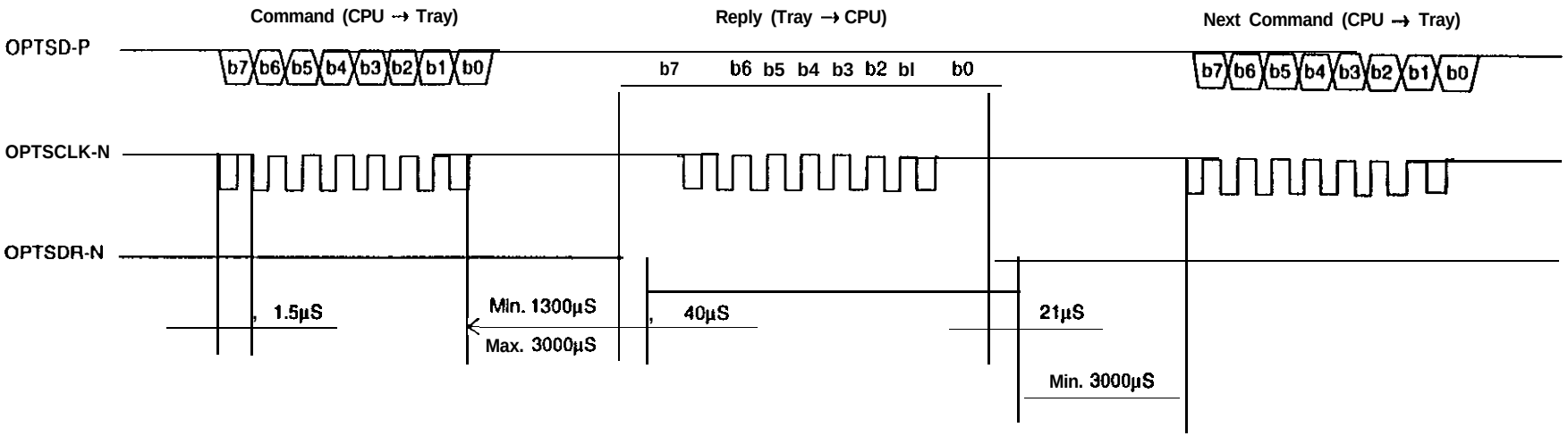


Figure 3-14 Option Tray Serial Interface Time Chart

Motor Control Time Chart

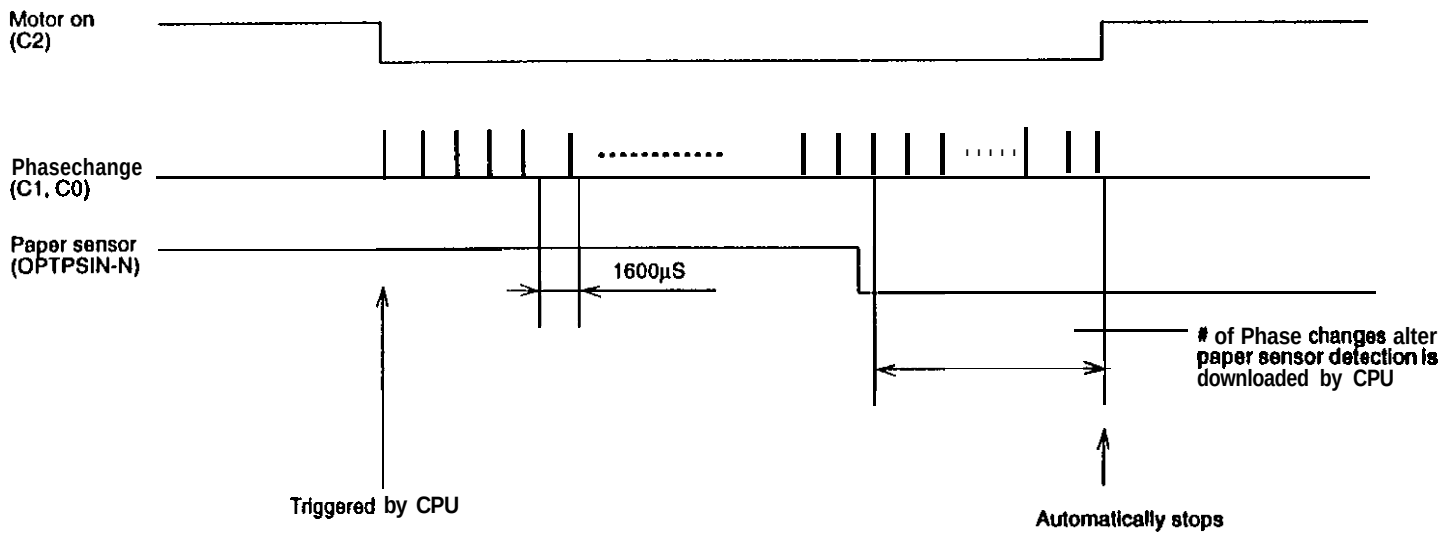


Figure 3-15 Option Tray Motor Control Time Chart

4. TROUBLESHOOTING

4.1 Troubleshooting Table

(A) Power Supply Board (OLAA-, OLVE-, OLVH-)

Note: A malfunction of the power supply is not repaired by an agency. The abnormality to be treated here is that of sensors only.

Failure	LCD Message	Flowchart No.
Paper input jams occur frequently.	PAPER INPUTJAM	A-1
Paper feed jams occur frequently.	PAPER FEEDJAMn	A-2
Paper exit jams occur frequently.	PAPER EXITJAMn	A-3
Paper size errors occur frequently.	PAPER SIZEERRn	A-4
The message 'TRAY PAPEROUT remains displayed on the LCD.	TRAY PAPEROUT	A-5
The message 'COVER OPEN' remains displayed on the LCD.	COVER OPEN	A-6
The message "TONERLOW" remains displayed on the LCD.	 TONERLOW	A-7
The message 'TONERSNS remains displayed on the LCD.	 TONERSNS	A-8
Toner sensor error. (OL400e/OL400ex only)	ERROR FF 	A-8

(B) Main Control Board (OLCW-. OLCL-. OLCE-, OLCW-3, OLCL-3, OLCE-3) **(1/2)**

Failure	LCD Message	flowchart No.
Abnormal message display on the LCD (no display, unclear display. display with some dot not lit).		**B-1**
Program ROM error	ERROR 10	B-2
Font ROM error	ERROR 20	B-3
Resident RAM error	ERROR 30	**B-4**
EEPROM error	ERROR 40	B-5
Option RAM error	ERROR 60	B-5
Cooling fan error	ERROR 70	B-7
Fuser error	ERROR 71	B-0
Watchdog timer timeout occurs frequently.	ERROR 90	B-9
Controller error n: Exception code aaaaaaaa: Error address	ERROR On aaaaaaaa	B-10
Option card sum check errors occur frequently.	CARD FORMAT	**B-11**
Option card errors occur frequently.	CARD ERROR	B-12

(B) Main Control Board (OLCW-, **OLCL-, OLCE-, OLCW-3, OLCL-3,** OLCE-3) (2/2)

Failure	LCD Message	Flowchart No.
Print Overrun occurs frequently.	PRINT OVER RUN	B-13
Receive buffer overflow occurs frequently.	REC BUFF OVERFLOW	B-14
The message 'COVER OPEN" remains displayed on the LCD.	COVER OPEN	B-15
The message "WARM UP" remains displayed on the LCD.	WARM UP	B-16
The printing is disturbed.		B-17
The key switch operation on the operator panel is disabled.		B-18
Loop test errors occur frequently.		B-19
Font print is disabled even when the font card is installed.		B-20
Data sent through the centronics I/F cannot be received.		B-21
Data sent through the RS232C I/F cannot be received.		B-19
The MENU PRINT memory capacity does not increase even when an expansion memory board is installed.		B-6

(C) Operator Panel Board (OLLD, OLCC-)

Failure	LCD Message	Flowchart No.
Abnormal message display on the LCD (no display, unclear display, display with some dot not lit, etc.)		C-1
The key switch operation on the operator panel is disabled.		C-2

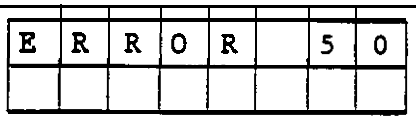
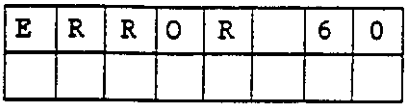
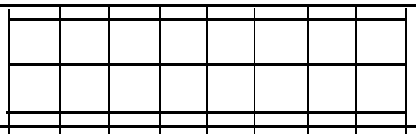
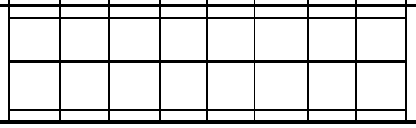
(D) Operator Panel Board (OLLB-, OLCC-)

Failure	LCD Message	Flowchart No.
The LCD does not display any message.		D-1
Display on the LCD with some dot not lii.		D-2
Unclear display on the LCD.		D-3
Operator panel I/F timeout error.	E R R O R 8 0	c-3

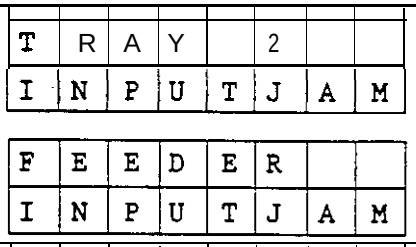
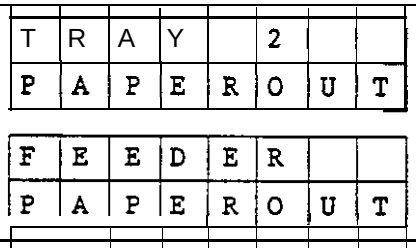
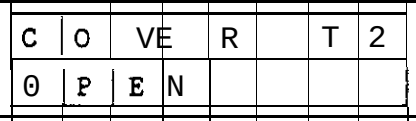
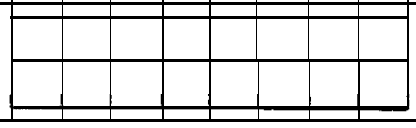
(E) Memory Expansion Board (OLCB-)

Failure	LCD Message	Flowchart No.
Option RAM error	E R R O R 6 0	E-1

(F) PostScript Board (OLPT-)

Failure	LCD Message	Flowchart No.
PostScript ROM error.		F-I
Option RAM error.		F-2
Data sent through the LocalTalk I/F cannot be received.		F-3
The menu settings always go back to default settings at power-up time.		F-3
Pages with fatal error message are printed frequently.		F-5

(G) Option Tray Board (OLEV-, OLEV-2)

Failure	LCD Message	Flowchart No.
Paper, input jams occur frequently.		G-I
Paper out occurs even if the papers are in a cassette or a tray.		G-2
Second tray cover open errors occur even if the cover is closed.		G-3
The printer does not recognize an option tray.		G-4

4.2 Troubleshooting Flowchart

A-1 Paper input jams **occur** frequently.

. Is PS3 (inlet Sensor 1) operating normally?

. No — Replace PS3.

Yes — Is **PS5** (inlet Sensor 2) operating normally?

• No — Replace **PS5.**

Yes — Replace CN3.

A-2 Paper feed jams occur frequently.

. Is PS3 (Inlet Sensor 1) operating normally?

• No — Replace PS3.

Yes — Is **PS5** (Inlet Sensor 2) operating normally?

. No — Replace **PS5.**

Yes — Is PS2 (Paper Sensor) operating normally?

. No — Replace PS2.

Yes — Is **PS1** (Outlet Sensor) operating normally?

• No — Replace **PS1**

Yes — Replace CN3.

A-3 Paper exit jams occur frequently.

. Is **PS1** (Outlet Sensor) operating normally?

. No — Replace **PS1**

Yes — Replace CN3.

A-4 Paper size errors occur frequently.

- Is PS3 (Inlet Sensor 1) operating normally?
  - No — Replace PS3.
  - Yes — Is PS5 (Inlet Sensor 2) operating normally?
    - No — Replace PS5.
    - Yes — Replace CN3.

A-5 The message 'TRAY PAPEROUT' remains displayed on the LCD

- Is PS4 (Paper End Sensor) operating normally?
  - No — Replace PS4.
  - Yes — Replace CN3.

A-6 The message "COVER OPEN' remains displayed on the LCD.

- Is SW2 (Cover Open Switch) operating normally?
  - No — Replace SW2.
  - Yes — Replace CN3.

A-7 The message 'TONERLOW" remains displayed on the LCD.

- Is PS6 (Toner Sensor) operating normally?
  - No — Replace PS6.
  - Yes — Replace CN3.

A-8 The message "TONERSNS" remains displayed on the LCD.

- Is PS6 (Toner Sensor) operating normally?
  - No — Replace PS6.
  - Yes — Replace CN3.

B-1 Abnormal message display on the LCD.

• Replace **Q2** (MB8382OOAP-G-602)

↓

• **OK?**

↓

No Is the **15.97-MHz** clock signal being put out to pin 3 of **OSC1?**

. No Replace **OSC1** (CST **15.97MXW040)**

↓

Yes Is the output at pin 13 (CLRST-N) of **Q10** (NJM2901 or **µPC339G2)** normal? (Refer to (3.3 Reset Control] page 6)

. No Replace **Q10** (NJM2901 or **µPC339G2)**

↓

Yes Failure of **Q1 (MHM2028K-001K)**

B-2 Program ROM error (ERROR 10)

. Replace **Q2 (MB838200AP-G-602)**

B-3 Font ROM error (ERROR 20)

• Replace Q2 **(MB838200AP-G-602)**

B-4 Resident RAM error (ERROR 30)

. Are negative pulses being **put** out to Pin 24 (DRASO-N) of **Q5 (HM514260ZP-8)?**

↓

Yes • Are Not the signals at Pin(s) 2 to 9, 11 to 15. 17 to 20 **(D00-P** to **D15-P)** of **Q5 (HM514260ZP-8)** being changed?

Failure of Q1 (MHM2028K-001K).

• No Failure of **Q1 (MHM2028K-001K).**

↓

Yes Replace **Q5 (HM514260ZP-8).**

B-5 EEPROM error (ERROR 40)

- Replace **Q9 (BR93LC46A).**
- OK?
- No — Failure of **Q1 (MHM2028K-001K).**

B-6 . Option RAM error (ERROR 60)

- The MENU PRINT memory capacity does not increase even when an expansion memory board is installed.

- Are negative pulses being put out to Pin 29 **(DRAS2-N),** Pin 30 **(DRAS4-N),** Pin 69 **(DRAS3-N),** Pin 70 **(DRAS5-N)** of **CN11?**
  - . No — Failure of **Q1 (MHM2028K-001K).**
- Yes — Failure of OLCB-PCB. Go to flowchart (E-l)

B-7 Cooling fan error (ERROR 70)

- Is the fan rotating?

- **No** — Is **+38V** power being supplied to Pin 1 (FAN POW) of **CN1?**
  - No — Is the output at Pin 109 (FANON-P) of **Q1 (MHM2028K-001K)** being at high level?
    - . No — Failure of **Q1 (MHM2028K-001K).**
  - Yes — Is **+38V** power being supplied to **R504?**
    - . No — Replace **TR1.**
  - Yes — Replace **TR2.**
- **Yes** — Are negative pulses put out to Pin 3 (FANALM-N) of **CN1?**
  - . No — Replace the fan.
- Failure of **Q1 (MHM2028K-001K).**

B-8 Fuser error (ERROR 71)

s the heater on?

- **No** Is the **voltage** at Pin 13 (HEATON-N) of Q8 **(SN7407NS)** OV?
  - Yes Replace **Q8 (SN7407NS).**
- **No** Are the outputs at Pin 1 **(TEMP1-N),** Pin 2 **(TEMP2-N)** of **Q10 (NJM2901** or **µPC339G2)** being at high level?
  - Yes Failure of **Q1 (MHM2028K-001K).**
- **No** Are the powers being supplied to the following pins of **Q10** (NJM2901 or **µPC339G2)** as shown below?

  Pins 5: **3.79V** Pin 7: **2.96V** Pin 8: **2.67V**
  - No Replace **R563,** R566, or R567.
- **Yes** Replace **Q10** (NJM 2901 or **µPC339G2).**

Yes **Are the respective resistance values of R561, R562, R564, and R565 correct?**

- No Replace R561, **R562, R564,** and R565.

Yes Replace **Q10** (NMJ2901 or **µPC339G2).**

OK?

No Failure of **Q1 (MHM2028K-001K).**

B-9 Watchdog timer timeout (ERROR 90) occurs frequently.

Replace **Q2 (MB838200AP-G-602).**

OK?

No Failure of **Q1 (MHM2028K-001K).**

B-10 Controller error

. Failure of **Q1 (MHM2028K-001K).**

B-11 Option card sum check errors occur frequently.

B-12 Option card errors occur frequently.

Is the connection between **CN10** and the option card correct?

- No — Connect them correctly.

Yes — Are CNIO and **Q1 (MHM2028K-001K)** soldered to the board correctly?

- No — Solder them to the board correctly.

Yes — Replace **CN10** or failure of **Q1 (MHM2028K-001K).**

B-13 Print overrun occurs frequently.

Replace Q2 **(MB838200AP-G-602).**

OK?

No — Failure of **Q1 (MHM2028K-001K).**

B-14 Receive buffer overflow occurs frequently.

[Centronics I/F]

Is the BUSY signal being put out to Pin 11 (BUSY-P) of **CN8?**

No — Is the BUSY signal put out to Pin 1 **(PBUSY-P)** of Q8 **(SN7407NS)?**

- Yes — Replace Q8 **(SN7407NS).**

No — Failure of **Q1 (MHM2028K-001K).**

- Yes — Make sure of the setting of a host computer.

[Serial I/F]

Is the DTR signal being put out to Pin 4 (DTR) of **CN9?**

No — Is the **DTR** signal put out to Pin 9 (RSDTRO-N) of Q7 **(SN75188NS).**

. Yes — Replace CI7 **(SN75188NS).**

No — Failure of **Q1 (MHM2028K-001** K).

Yes — Make sure of the operation of a host computer, the setting of protocol and interface, etc.

B-15 The message *COVER OPEN' remains displayed on the LCD.

Is the connection of CN7 correct?

. No Connect it correctly.

l Yes Failure of **Q1(MHM2028K-001K).**

B-16 The message 'WARM UP' remains displayed on the LCD.

• Is the connection of CN7 correct?

• No Connect it correctly.

• Yes Failure of **Q1(MHM2028K-001K).**

B-17 The printing is disturbed frequently.

• Is the connection of CN4 correct?

. No Connect it correctly.

• Yes Failure of **Q1(MHM2028K-001K).**

B-18 The key switch operation on the operator panel is disabled.

. Is a clock signal put out to Pin 6 of **CN5?**

• No Failure of **Q1(MHM2028K-001K).**

• Yes Is a data signal put out to Pin 3 (OPDTOUT-P) of **CN5?**

. No Failure of **Q1(MHM2028K-001K).**

• **Yes** Is the data sent from OLLD- or OLCC-PCB put out to Pin 4 (OPDTIN-P) of **CN5?**

• **No** Make sure of the connection of CN5.

• OK?

• No Got0 (c-2)

• Yes Failure of **Q1(MHM2028K-001K).**

B-19 Loop test errors occur frequently.

Data sent through the serial UP cannot received.

- Are the respective levels of the signals at Pins, 3 (TXD), 4 (DTR), 7 (RTS) of CN9 correct?
  - No — Is -8V power being supplied to pin 1. and is +8V power being suppied to pin 14 and is +5V power being supplied to Pins, 5, 10, 12, 13, in Q7 (SN7407NS)?
    - . No — Make sure of the connection of CN7.
    - Yes — Are the respective levels of the signals at Pins, 2 (RSTXDO-P). 4 (RSRTSO-N), 9 (RSDTRO-N) of Q7 (SN7407NS) correct?
      - • No — Failure of Q1 (MHM2028K-001K).
      - Yes — Are the respective levels of the signals at Pins, 2 (TXD), 6 (RTS), 6 (DTR) correct?
        - . No — Replace Q7 (SN7407).
        - Yes — Make sure of the connection of CN9.
  - Yes — Is the signal at Pin 2 (RXD) of CN9 correct?
    - • No — Make sure of the connection of CN9 or the operation of the host computer.
  - Yes — Are D501 and D502 operating normally?
    - • No — Replace D501 or D502.
    - . OK?
    - • No
  - Yes — Failure of CI (MHM2028K-001 K).

B-20 Font print is disabled even when the font card is installed.

- Is the connection between the font card and CN10 correct?
  - No — Connect them correctly.
  - OK?
- No
- Yes — Is the signal at Pin 72 (CRDCNT-N) of Q1 (MHM2028K-001K) being at low level?
  - No — Replacement CN10.
- Yes — Failure of Q1 (MHM2028K-001K).

B-21 Data sent through the centronics I/F cannot be received.

s the signal at Pin 11 (BUSY-P) of CN8 being at low level?

- No — Is the signal at Pin 1 (PBUSY-P) of Q8 (SN7407NS) changed as shown below, at data reception?

	ON-LINE	OFF-LINE
PBUSY-P	Low	High

  - No — Failure of Q1 (MHM2028K-001 K).
- Yes — Replace Q8 (SN7407NS).

Yes — Is the level of the signal at Pin 1 (STB-N) of CN8 changed at data reception?

- No — Make sure of the connection of I/F cable or the operation of the host computer.

Yes — Are the signals at Pin 3 (PACK-N), Pin 5 (PERROR-N) of Q8 (SN7407NS) being respectively at low level and high level in on-line mode?

- No — Replace Q8 (SN7407NS).
- OK?
- No

Yes — Failure of Q1 (MHM2028K-001K).

C-1 Abnormal message display on the LCD (no display, unclear display, display with some dot not lit, etc.)

- Is +5V power being supplied to Pin 6 of IC1(BU5148S)?
  - No — Replace CN1.
  - Yes — Is the CLOCK signal put out to pin 26 (OP-CLOCK-N) of IC1(BU5148S)?
    - No — Replace CN1
    - Yes — Is the DATA signal put out to Pin 2 (OP-DATA-IN) of IC1(BU5148S)?
      - No — Replace CN1.
      - Yes — Is the LOAD signal put out to Pin 11 (OP-LOAD-N) of IC1(BU5148S)?
        - No — Replace Replace CN1
        - Yes — Is the DATA signal put out to Pin 24 (OP-DATA-OUT) of IC1(BU5148S)?
          - No — Replace IC1(BU5148S).
          - Yes — Is +5V power being supplied to Pin 1 of CN2? (OLLD-PCB)
            Is +5V power being supplied to Pin 2 of CN1? (OLCC-PCB)
            - No — Replace CN2. (OLLD-PCB)
              Replace CN1. (OLCC-PCE)
            - Yes — Is the DB signal put out to Pins, 19, 20, 29, 30 (DB4 to DB7) of IC1(BU5148S)?
              - No — Replace IC1(BU5148S).
              - Yes — Is the RS signal being put out to Pin 22 of IC1(BU5148S)?
                - No — Replace IC1(BU5148S).
                - Yes — Is the R/W signal being put out to Pin 27 of IC1(BU5148S)?
                  - No — Replace IC1(BU5148S).
                  - Yes — Is the E signal being put out to Pin 9 of IC1(BU5148S)?
                    - No — Replace IC1(BU5148S).
                    - Yes — Replace CN2.

C-2 The key switch operation on the operator panel is disabled.

. Are the level of the signal at Pins 3, 7, 10, 16, 23, 31 of **IC1 (BU5148S)** changed from the high level to the low one by the key switch pushing?

. No — Replace SW1 to **SW8.**

. Yes — Are the connection of **CN1** and CN2 correct? **(OLLD-PCB)**
Is the connection of **CN1** correct? (OLCC-PCB)

. No — Connect them correctly.

I Yes — Replace **IC1 (BU5148S).**

C-3 Operator panel **I/F** timeout error (ERROR **80).**

. Are the respective wave forms of the signals at Pins 4. 1, 6 of **CN1** correct?

. No — Replace flexible cable.

OK?

No — Failure of main control board.

. Yes — Is the waveform of the signal at Pin 3 of **CN1** correct?

. No — Replace **IC1 (BU5148S).**

OK?

4 No — Replace **IC2.**

Yes — Replace flexible cable.

OK?

No — Failure of main control board.

D-1 The LCD does not display any message.

Is +5V power being supplied to Pin 33 of IC2 (HD44780)?

. No — Replace CN3. (OLLB-PCB)
Replace CN1. (OLCC-PCB)

Yes — Are 4.15V, 3.3V, 2.46V, 1.61V, and 0.77V powers being supplied respectively to Pin 26, Pin 27, Pin 26, Pin 29, Pin 30 of IC2 (HD44780)?

No — Are the resistance values of R8 through R13 correct? (OLLB-PCB)
Are the resistance values of R5 through R10 correct? (OLCC-PCB)

• No — Replace R8 through R13. (OLLB-PCB)
Replace R5 through R10. (OLCC-PCB)

Yes

Yes — Replace IC2 (HD44780).

OK?

No — Replace CN3. (OLLB-PCB)
Replace CN1. (OLCC-PCB)

OK?

No — Is the contact surface of a zebra rubber dirty?

. No — Clean the dirt.

Yes — Replace the zebra rubber.

OK?

No — Replace the LCD.

D-2 Display on the LCD with some dot not lii

Are **4.15V, 3.3V, 2.46V, 1.61V,** and **0.77V** powers being supplied respectively to Pin 26, Pin 27, Pin 26, Pin 29, Pin 30 of **IC2 (HD44780)?**

. No — Replace **R8** through R13.
Replace **R5** through **R10.**

Yes — Is the COM signal being put out to Pins, 47 to 62 **(COM01** to COM16) of **IC2 (HD44780)?**

. No — Replace **IC2 (HD44780).**

Yes — Is the SEG signal being pul out to Pins, 1 to 22 (SEG 19 to SEG40). Pins, 63 to 60 **(SEG01** to SEG16) of IC2 **(HD44780)?**

. No — Replace IC2 (HD44760).

Yes — Is the contact surface of a zebra rubber **dirty?**

. No — Clear the dirt.

Yes — Replace the zebra rubber.

OK?

No — Replace the LCD.

D-3 Unclear display on the LCD.

Is **+5V** power being supplied to Pin 33 of IC2 **(HD44780)?**

• No — Replace CN3. (OLLB-PCB)
Replace **CN1** (OLCC-PCB)

Yes — Are **4.15V, 3.3V, 2.46V, 1.61V,** and **0.77V** powers being supplied respectively to Pin 26, Pin 27, Pin 28, Pin 29, Pin 30 of **IC2 (HD44780)?**

. No — Replace **R8** through R13. (OLLB-PCB)
Replace **R5** through **R10.** (OLCC-PCB)

Yes — Is the contact surface of a zebra rubbber dirty?

• No — Clear the dirt.

Yes — Replace the zebra rubber.

OK?

No — Replace the LCD.

E-1 Option RAM error (ERROR 60)

- Is the connection between **CN1** of OLCB-PCB and **CN11** of OLCW-PCB correct?
  - No — Connect them **correctly.**

Yes Are the short plugs **SP1** to SP16 set **correctly?** (See the maintenance manual).

- No — Set them correctly.

Yes Are the signals at Pins, 11 to 16 **(DRD01-P** to **DRD14-P)** of 02 and Q3 **(74LS245AFP)** being changed?

- No — Replace Q2 and Q3 **(74LS245AFP).**

Yes Are negative pulses being put out to Pins, 7, 9, 12, 14 (DRRASO-N to DRRAS3-N) of Q4 **(SN74ALS244BNS)?**

- No — Replace **Q4 (SN74ALS244BNS).**

Yes Are negative pulses being put out to Pin 14 (DRRD-N), Pin 18 (DRWR-N) of Q6 **(SN74ALS244BNS)?**

- No — Replace Q6 **(SN74ALS244BNS).**

Yes Are positive pulses put out to Pins, 3, 5, 16, 16 (DRAOO-P to **DRA03-P)** of Q4 **(SN74ALS244BNS)** and to Pins, 3, 5, 7, 9. 12, 14, 16, 16 **(DRA04-P** to DRA11-P) of **Q5 (SN74ALS244BNS).**

- No — Replace **Q4** or **Q5 (SN74ALS244BNS).**

Yes Replace D-RAM.

F-1 PostScript ROM error (ERROR 50)

- Is the connectton between CN2 of OLPT- PCB and CN11 of OLCW-correct?
  - . No — Connect them correctly.
- 'Yes — Is negative pulse being sent to Pin 7 (BUCS3-N) of 02E(74ALS244)?
  - . No — Replace 02E(74ALS244).
- 'Yes — Are positive pulses being Sent to Pins 3, 5, 7. 9, 12. 14, 16. 18 (DRA01-P to DRA08-P) of 01E(74ALS244), to Pins 3, 5, 7. 9. 12, 14, 16, 18 (DRA13-P to DRA20P) of 04E(74ALS244) and to Pins 3. 5, 16, 18 (DRAOQ-P to DRA12-P) of 05E(74ALS244)?
  - . No — Replace 01E(74ALS244), 04E(74ALS244) or 05E(74ALS244).
- 'Yes — Replace 03B(M531622C-xx 02).
- (DK?
- !No — Replace the 03C(M531622C-xx01).
- OK?
- !No — Failure of OLCW- PCB.

F-2 Option RAM Error (ERROR 60).

. Is the connection between CN2 of OLPT-PCB and CN11 of OLCW-correct?

- • No — Connect them correctly.

Are negative pulses being sent to Pins 5, 7, 12, 14 (DRRASO-N to DRRAS3-N) of 05E(74ALS244)?

- . No — Replace 05E(74ALS244).

- Yes — Is 'negative pulse being sent to Pin 14 (DRRD-N) and Pin 18 of 02E(74ALS244)?
  - . No — Replace 02E(74ALS244).

Are positive pulses being sent to Pins 3. 5, 7, 9, 12. 14. 16, 18 (DRA 13-P to DRA20-P) of 04E(74ALS244) and to Pins 3. 5, 16. 18 (DRAOQ-P to DRA12-P) of 05E(74ALS244)??

- . No — Replace 04E(74ALS244) or 05E(74ALS244).

- Yes — Replace D-RAM.

F-3 Data sent through the LocalTalk I/F cannot be received.

- Is the signal at Pin 3 of OSC1(SG-52P) being oscillated?
  - . No — Replace OSC1 (SG-52P).
- Yes — Is the signal at Pin 3 of 03A(26LS32) being altered?
  - . No — Replace 03A(26LS32).
- Yes — Are negative pulses being sent to Pins 3, 6, 6, 11 of 03E(74ALS00)?
  - . No — Replace 03E(74ALS00).
- Yes — Is the negative pulse being sent to Pin 6 of 03D(74HC14)?
  - • No — Replace 03D(74HC14).
- Yes — Are positive pulses being Sent to Pins 3 and 16 (DRA07-P and DRA06-P) of 01E(74ALS244)?
  - . No — Replace 01 E(74ALS244).
- Yes — Is -5V out being sent to Pin 3 of 01C(79L05)?
  - . No — Replace 01C(79L05).
- Yes — Replace 01B(26LS30).
- OK?
- No — Replace 02C(85C30J).

F-4 The menu settings always go back to the default settings at power-up time.

- Are the signals at Pins 2 and 12 of 03D(74HC14) altered when PostScript menu setting is changed?
  - . No — Replace 03D(74HC14).
- Yes — Replace EEPROM(93C66) at 01 F.

F-5 Pages with fatal error message are printed frequently.

- Replace 03C(M531622C-xx 02).
- OK?
- No — Replace 03B(M531622C-xx01).
- OK?
- No — Failure of OLCW-PCB.

G-1 Paper input jams occur frequently.

s the motor rotating?

- No — Has the fuse F2 opened?
  - No — Is the high voltage (around 30V) being sent to Pin 2 of DI and Pin 2 of D2?
    - . No — Replace DI or D2.
    - Yes — Is the signal level at Pin 22 of IC2 at low level?
      - . No — Replace IC2.
      - Yes — Are the signals at Pins 20 and 21 of IC2 being altered?
        - . No — Replace IC2.
        - Yes — Is the signal level at Pin 2 of TR1 around 5V?
          - . No — Replace TR1
          - Yes — Are the signals at Pins 1 to 4 of CN3 being altered?
            - . No — Replace IC3.
            - Yes — Replace motor.
- Yes — Are there any burned printed patterns or parts?
  - Yes — Replace OLEV- PCB.
  - No — Have Pins 3, 11, 18. 26 of IC3 short-circuited or do they have low resistance?
    - No — Do R3, R4, R18 and R19 have correct values?
      - . No — Replace R3, R4, R18 or R19, and F2.
      - Yes — Replace F2.
    - Yes — Do R3, R4, R18 and R19 have correct values?
      - . No — Replace R3, R4, R18 or R19, and IC3 and F2.
      - Yes — Replace IC3 and F2.

Yes — Does the signal level at Pin 1 of CN1 change from high to low?

- No — Replace the cable.

• Yes Does the signal level at Pin 28 of IC2 change from high to low?

• No Replace R9.

• Yes Replace IC2.

G-2 Paper out occurs even if the papers are in a cassene or a tray.

. Is paper sensor (SEN1 in Second Tray and SEN2 in Multi-purpose Feeder) operating normally?

. No Replace the paper sensor.

• Yes Is SW1 operating normally? (Second Tray only)

. No Replace SW1.

• Yes Replace IC2.

G-3 Second tray cover open errors occur even if the cover is closed.

. Is SEN2 (cover open sensor) operating normally?

• No Replace SEN2.

• Yes Replace IC2.

G-4 The printer does not recognize an option tray.

. Do signal levels at Pin 2(OPTSCLK-N) and 3(OPTSD-P) CN1 alter at power-up time?

• No Replace Option Tray Cable.

• Yes Do signal levels at Pin 1 of R10 and Pin 1 of R14 alter at power-up time?

. No Replace R10 or R14.

• Yes Do signal levels at Pin 4. 7, and 9 of IC2 alter at power-up time?

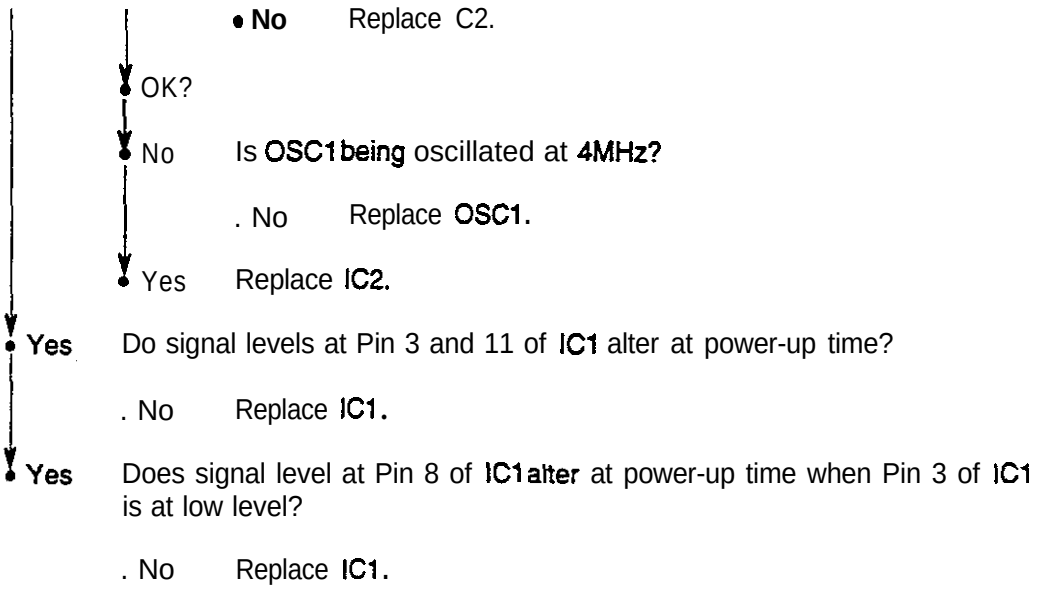
. No Is signal level at Pin 2 of D4 at 3.9V?

• No Replace D4.

• Yes Is signal Level at Pin 2 of TR4 around 5V?

• No Replace TR4.

• Yes Is signal level at Pin 2 of C2 high?


• No
Replace C2.
OK?
No
Is OSC1 being oscillated at 4MHz?
. No
Replace OSC1.
Yes
Replace IC2.
Yes
Do signal levels at Pin 3 and 11 of IC1 alter at power-up time?
. No
Replace IC1.
Yes
Does signal level at Pin 8 of IC1 alter at power-up time when Pin 3 of IC1 is at low level?
. No
Replace IC1.

5. CIRCUIT DIAGRAM

Figure 5-1-5-16	Main Control PCB (OLCW-) Circuit diagram (Rev. 4)
Figure 5-17-5-32	Main Control PCB (OLCW-) Circuit diagram (Rev. 5)
Figure 5-33~5-47	Main Control PCB (OLCW- & OLCW-3) Circuit diagram (Rev. 6)
Figure 5-48-5-62	Main Control PCB (OLCW- & OLCW-3) Circuit diagram (Rev. 7)
Figure 5-63-5-77	Main Control PCB (OLCW- & OLCW-3) Circuit diagram (Rev. 8)
Figure 5-78-5-93	Main Control PCB (OLCL- & CLCL-3) Circuit diagram
Figure 5-94~5-109	Main Control PCB (OLCE- 8 OLCE-3) Circuit diagram
Figure 5-110	Operator Panel PCB (1/2) (OLLB-) Circuit diagram (Rev. 3 & 4)
Figure 5-l 11	Operator Panel PCB (2/2)(OLLD-) Circuit diagram (Rev. 4 & 5)
Figure 5-l 12	Operator Panel PCB (OLCC-) Circuit diagram (Rev. 1)
Figure 5-1 13	Operator Panel PCB (OLCC-) Circuit diagram (Rev. 2-4)
Figure 5-l 14~5-118	Option RAM PCB (OLCB-) Circuit diagram (Rev. 4)
Figure 5-l 19-5-123	Option RAM PCB (OLCB-) Circuit diagram (Rev. 5 & 8)
Figure 5-124-5-128	Option RAM PCB (OLCB-) Circuit diagram (Rev. 7 Type A)
Figure 5-129-5-133	Option RAM PCB (OLCB-) Circuit diagram (Rev. 7 Type B)
Figure 5-134-5-135	Option RAM PCB (OLCF-) Circuit diagram (Rev. 2)
Figure 5-136-5-142	PostScript PCB (OLPT-) Circuit diagram (Rev. 5)
Figure 5-143-5-144	Option Tray PCB (OLEV-) Circuit diagram (Rev. 1)
Figure 5-145-5-146	Option Tray PCB (OLEV-) Circuit diagram (Rev. 2 8 3)
Figure 5-147-5-148	Option Tray PCB (OLEV-) Circuit diagram (Rev. 4)
Figure 5-149	Power Supply PCB (OLAA-) Circuit diagram (Rev. 4 & 5)
Figure 5-150~5-151	Power Supply PCB (OLVE-) Circuit diagram
Figure 5-152-5-153	Power Supply PCB (OLVH-) Circuit diagram

Main Control Board (OLCW-PCB, Rev. 3)	OL400e	4YA4121-1007G11
Main Control Board (OLCW-PCB, Rev. 4)	OL400e	4YA4121-1007G11
Main Control Board (OLCW-PCB, Rev. 5)	OL400e	4YA4121-1007G11
Main Control Board (OLCW-PCB. Rev. 6)	OL400e	4YA4121-1007G11
Main Control Board (OLCW-PCB, Rev. 7)	OL400e	4YA4121-1007G11
Main Control Board (OLCW-PCB, Rev. 8)	OL400e	4YA4121-1007G11
Main Control Board (OLCW-3 PCB, Rev. 6)	0L41 0e/OL41 Oex	4YA4121-1007G13
Main Control Board (OLCW-3 PCB, Rev. 7)	OL410e/OL410ex	4YA4121-1007G13
Main Control Board (OLCW-3 PCB, Rev. 8)	OL41 0e/OL41 Oex	4YA4121-1007G13
Main Control Board (OLCL-PCB)	OL400e/OL400ex	4YA4121-1046G11
Main Control Board (OLCL-3 PCB)	OL410e/OL410ex	4YA4121-1046G13
Main Control Board (OLCE-PCB)	OL400e/OL400ex	4YA4121-1038G11
Main Control Board (OLCE-3 PCB)	OL410e/OL410ex	4YA4121-1038G13
Operator Panel 1/2 (OLLB-PCB. Rev. 3)		4YA4087-1027G1
Operator Panel 1/2 (OLLB-PCB, Rev. 4)		4YA4087-1027G1
Operator Panel 2/2 (OLLB-PCB, Rev. 4)		4YA4087-1028G1
Operator Panel 2/2 (OLLB-PCB, Rev. 5)		4YA4087-1028G1
Operator Panel (OLCC-PCB, Rev. 1)		4YA4130-1001G1
Operator Panel (OLCC-PCB, Rev. 2 & 3)		4YA4130-1001G1
Operator Panel (OLCC-PCB, Rev. 4)		4YA4130-1001G1
Option RAM (OLCB-PCB. Rev. 4)		4YA4121-1002G11
Option RAM (OLCB-PCB. Rev. 5 & 6)		4YA4121-1002G11
Option RAM (OLCB-PCB. Rev. 7)		4YA4121-1002G11
Option RAM (OLCF-PCB, Rev. 2)		4YA4121-1031G11

PostScript Board (OLPT-PCB, Rev. 5)	4YA4121-1022G11
PostScript Board (OLPT-2 PCB. Rev. 5)	4YA4121-1022G12
Multi-Feeder Board (OLEV-PCB, Rev. 1)	4YA4121-1014G11
Multi-Feeder Board (OLEV-PCB, Rev. 2 & 3)	4YA4121-1014G11
Multi-Feeder Board (OLEV-PCB, Rev. 4)	4YA4121-1014G11
Second Tray Board (OLEV-2 PCB, Rev. 1)	4YA4121-1014G12
Second Tray Board (OLEV-2 PCB, Rev. 2 8 3)	4YA4121-1014G12
Second Tray Board (OLEVQ PCB, Rev. 4)	4YA4121-1014G12
Power Supply Board (OLAA-PCB, 120V)	4YB4049-1759P1 4YB4049-1776P1
Power Supply Board (OLAA-2 PCB, 230V)	4YB4049-1766P1 4YB4049-1777P1
Power Supply Board (OLVE-PCE, 120V)	4YA4049-7072G1
Power Supply Board (OLVH-PCB, 230V)	4YA4049-7072G2

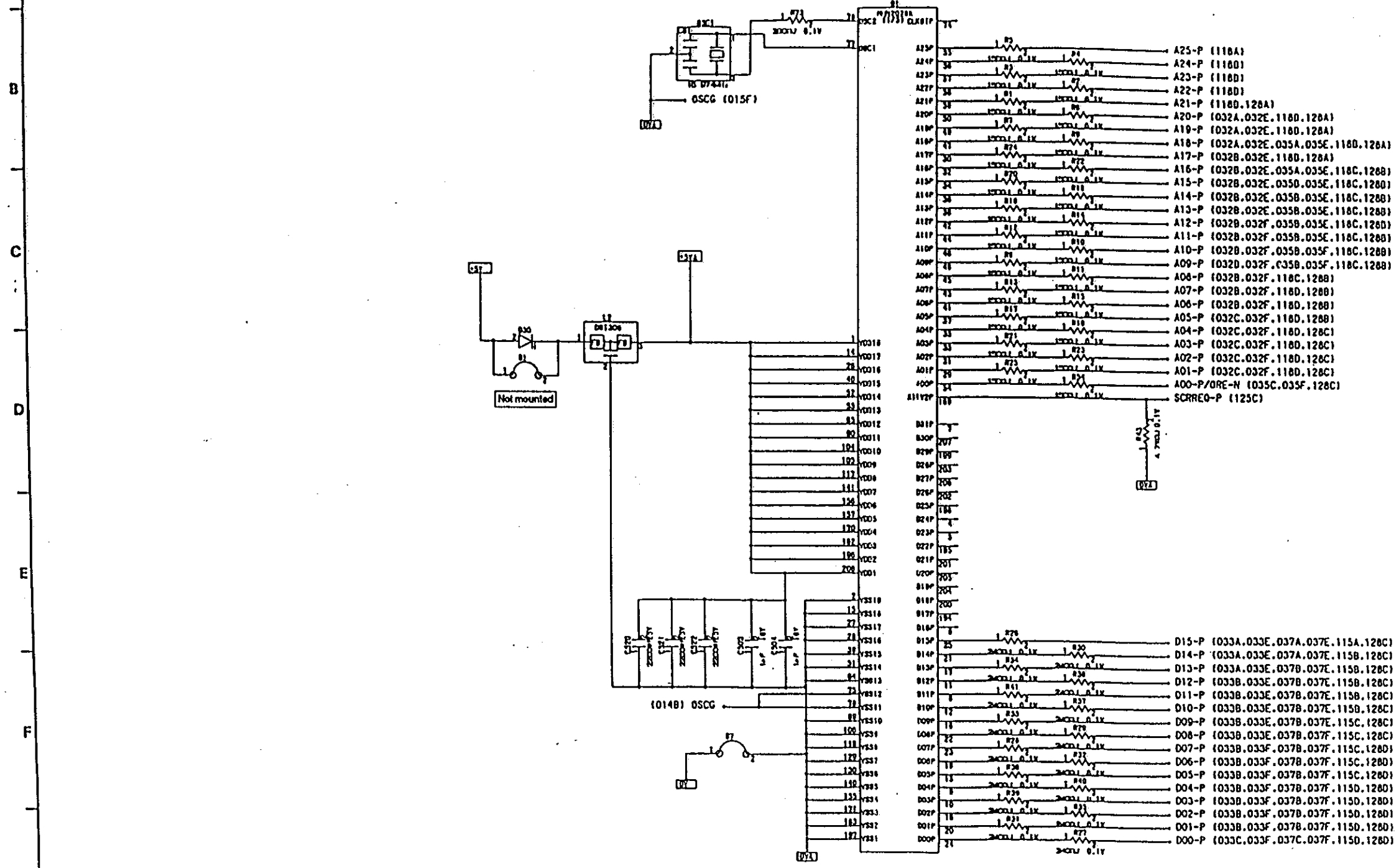


Figure 5-1 Main Control PCB (OLCW-1/16) Circuit Diagram (Rev. 4)

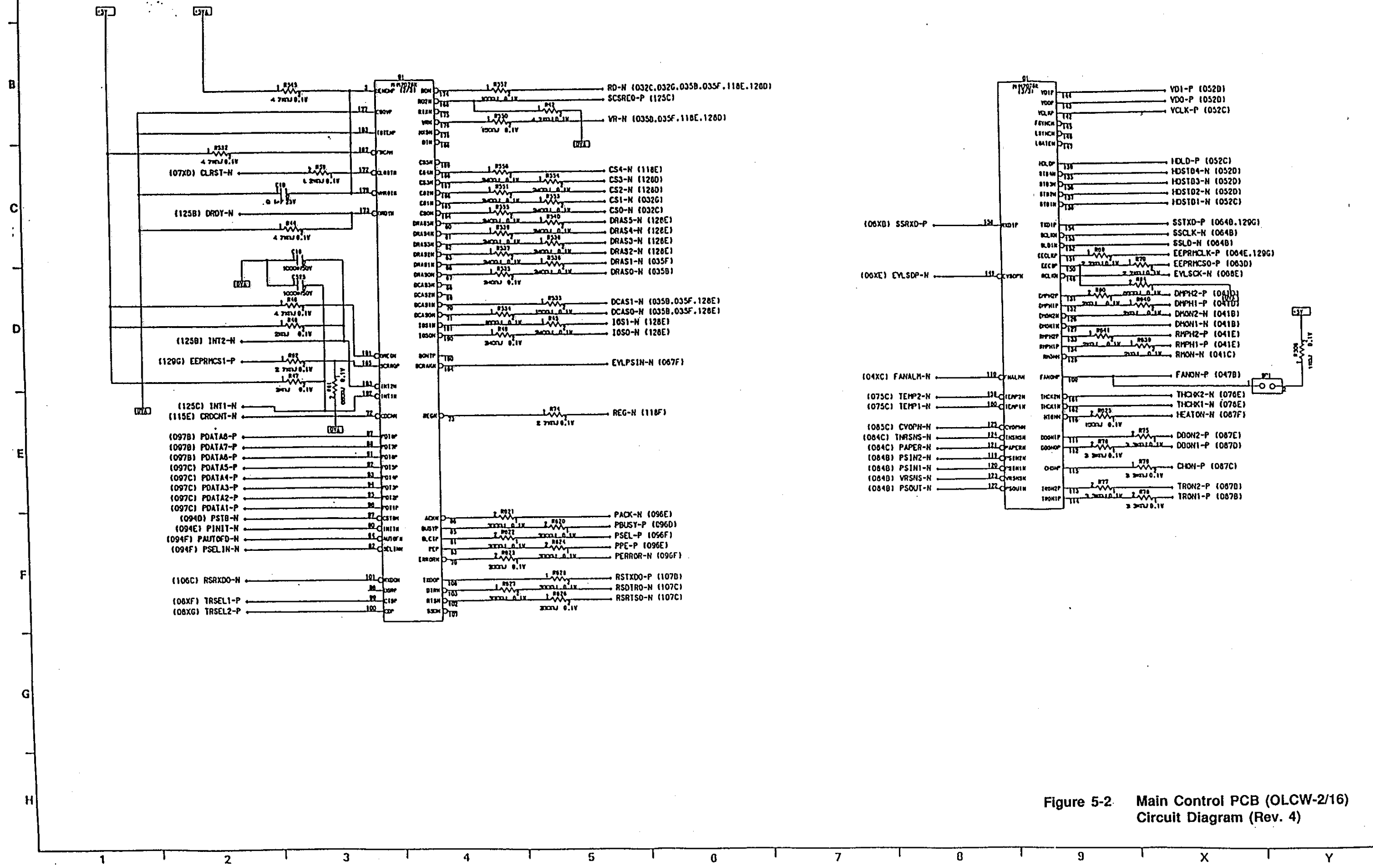


Figure 5-2 Main Control PCB (OLCW-2/16) Circuit Diagram (Rev. 4)

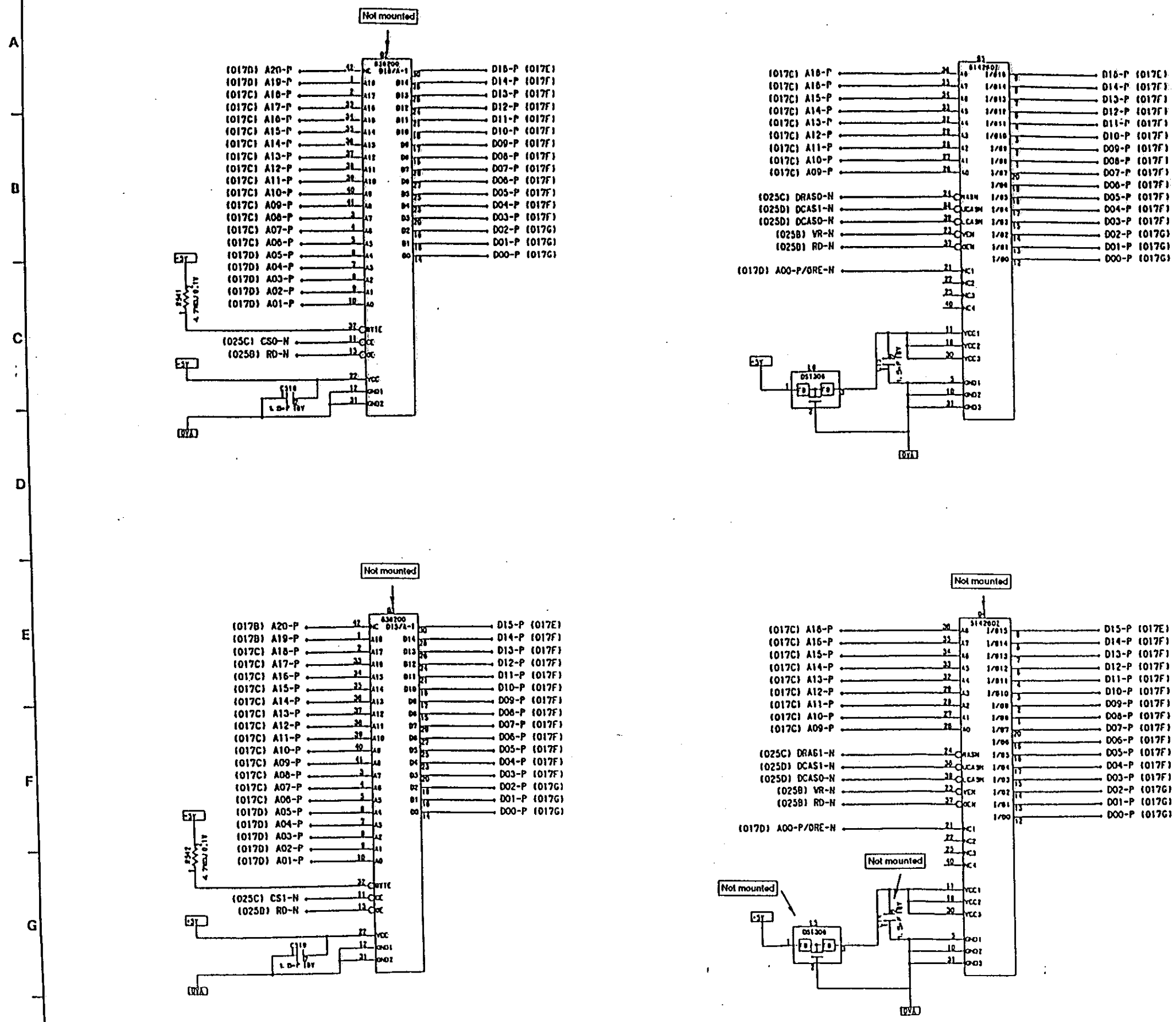


Figure 5-3 Main Control PCB (OLCW-3/16) Circuit Diagram (Rev. 4)

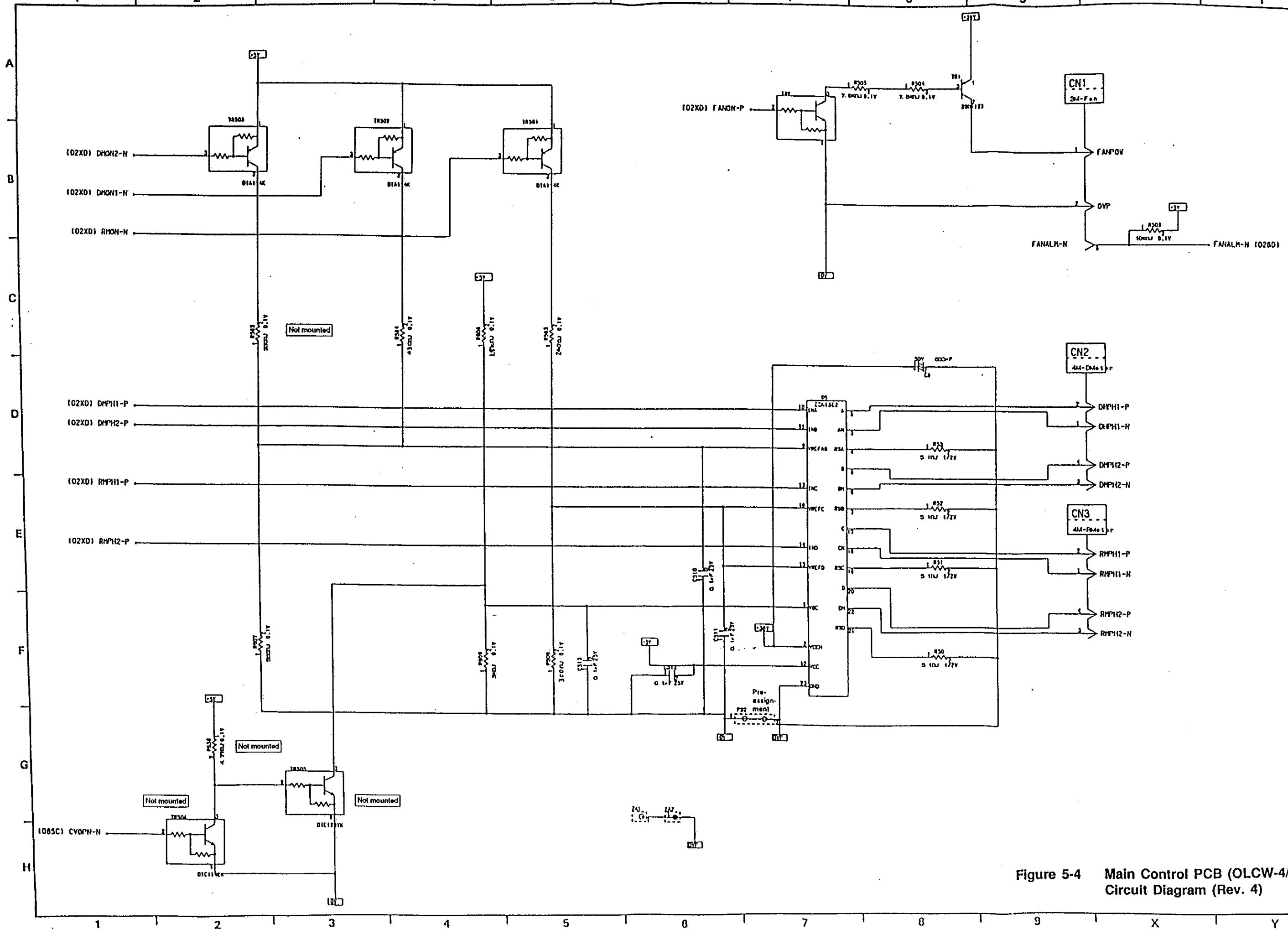


Figure 5-4 Main Control PCB (OLCW-4/16) Circuit Diagram (Rev. 4)

4

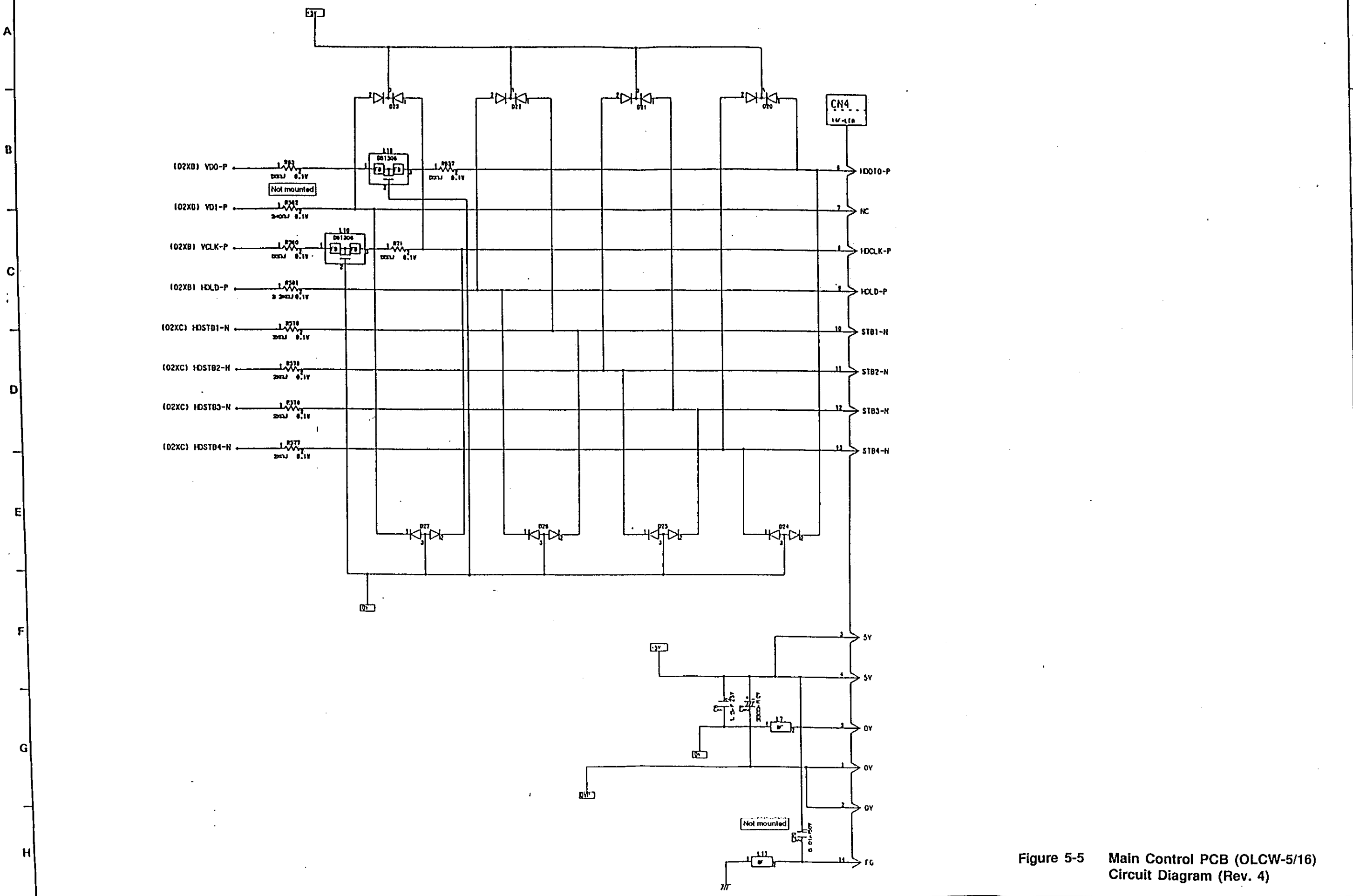


Figure 5-5 Main Control PCB (OLCW-5/16) Circuit Diagram (Rev. 4)

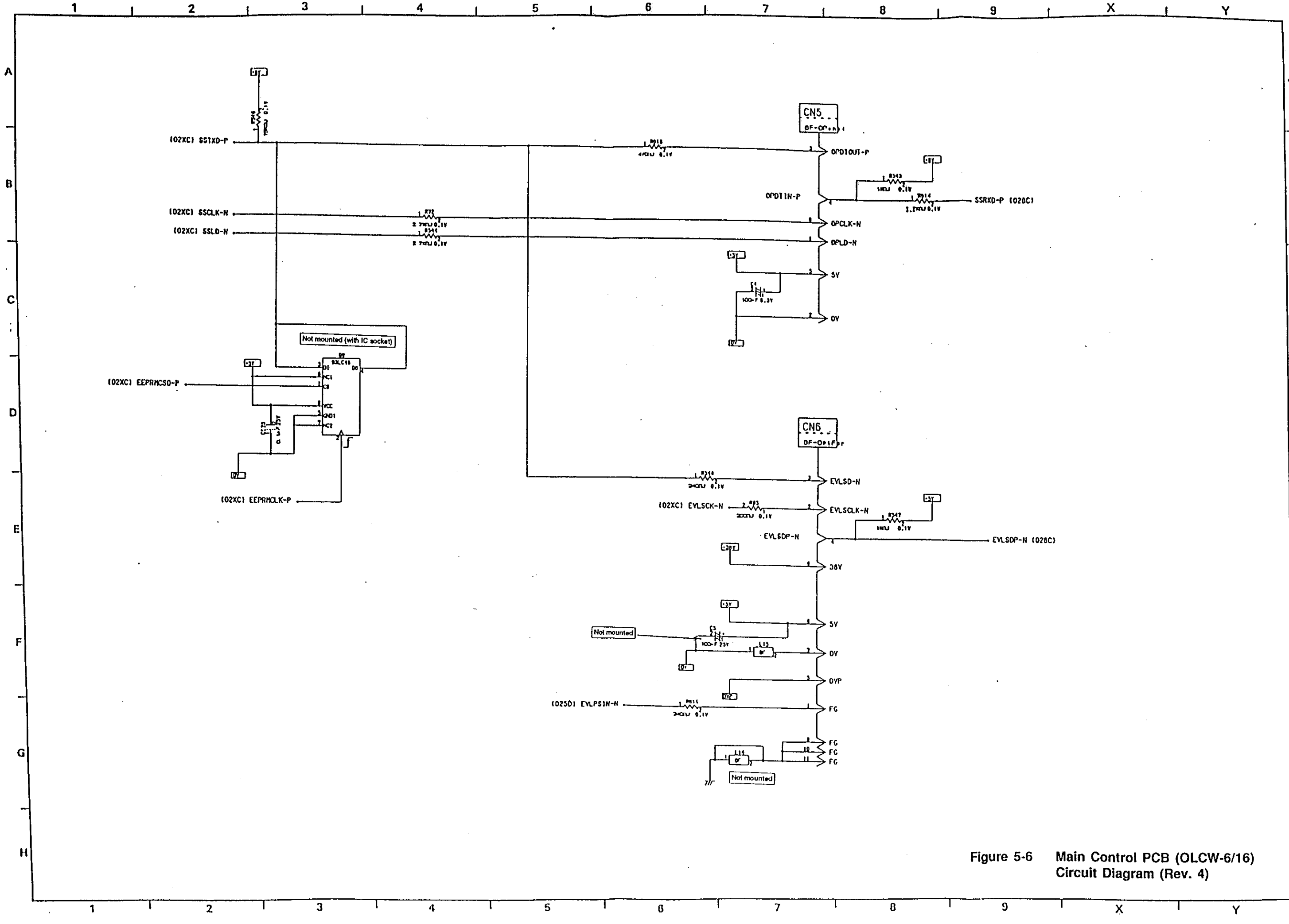


Figure 5-6 Main Control PCB (OLCW-6/16) Circuit Diagram (Rev. 4)

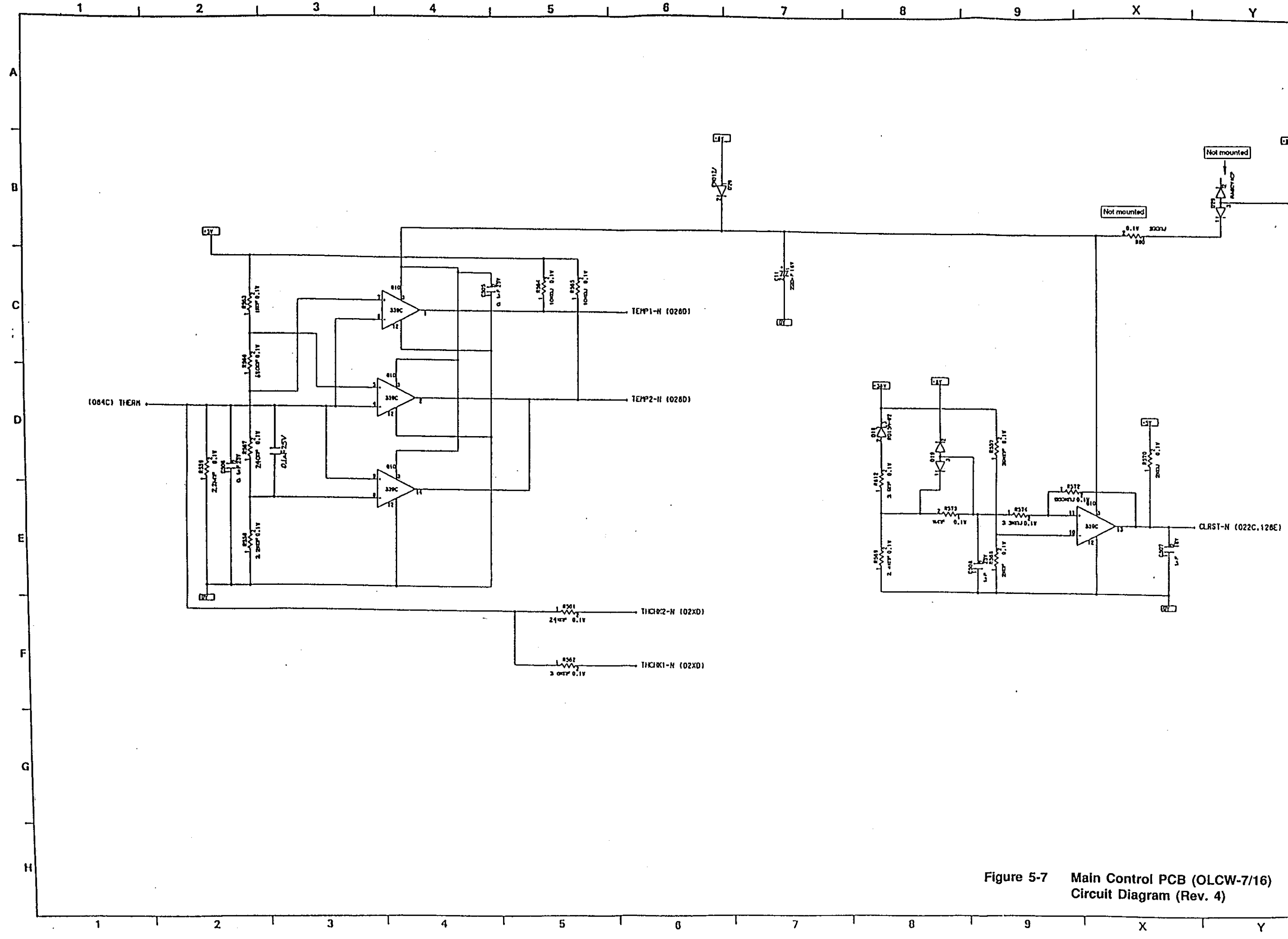


Figure 5-7 Main Control PCB (OLCW-7/16) Circuit Diagram (Rev. 4)

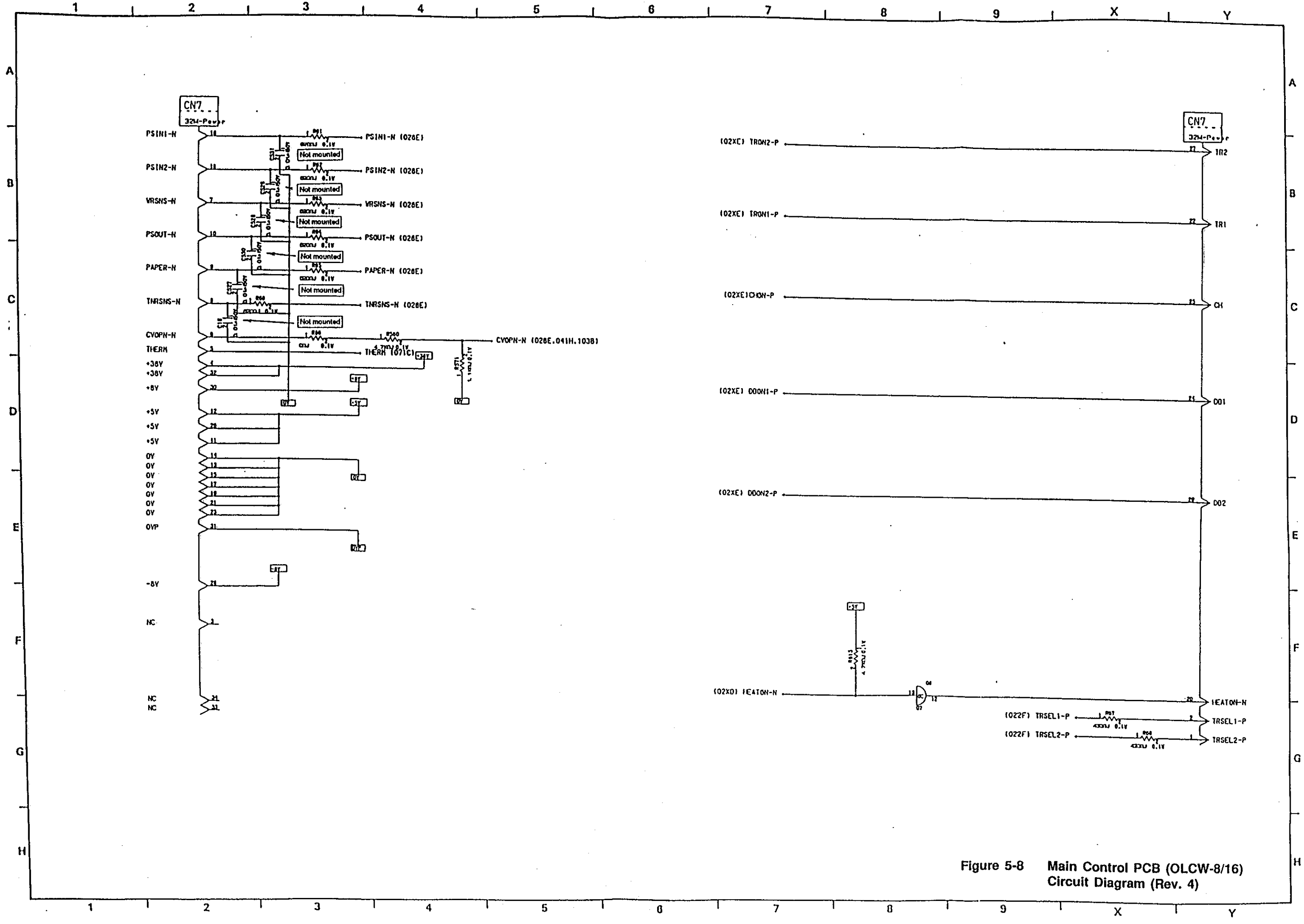
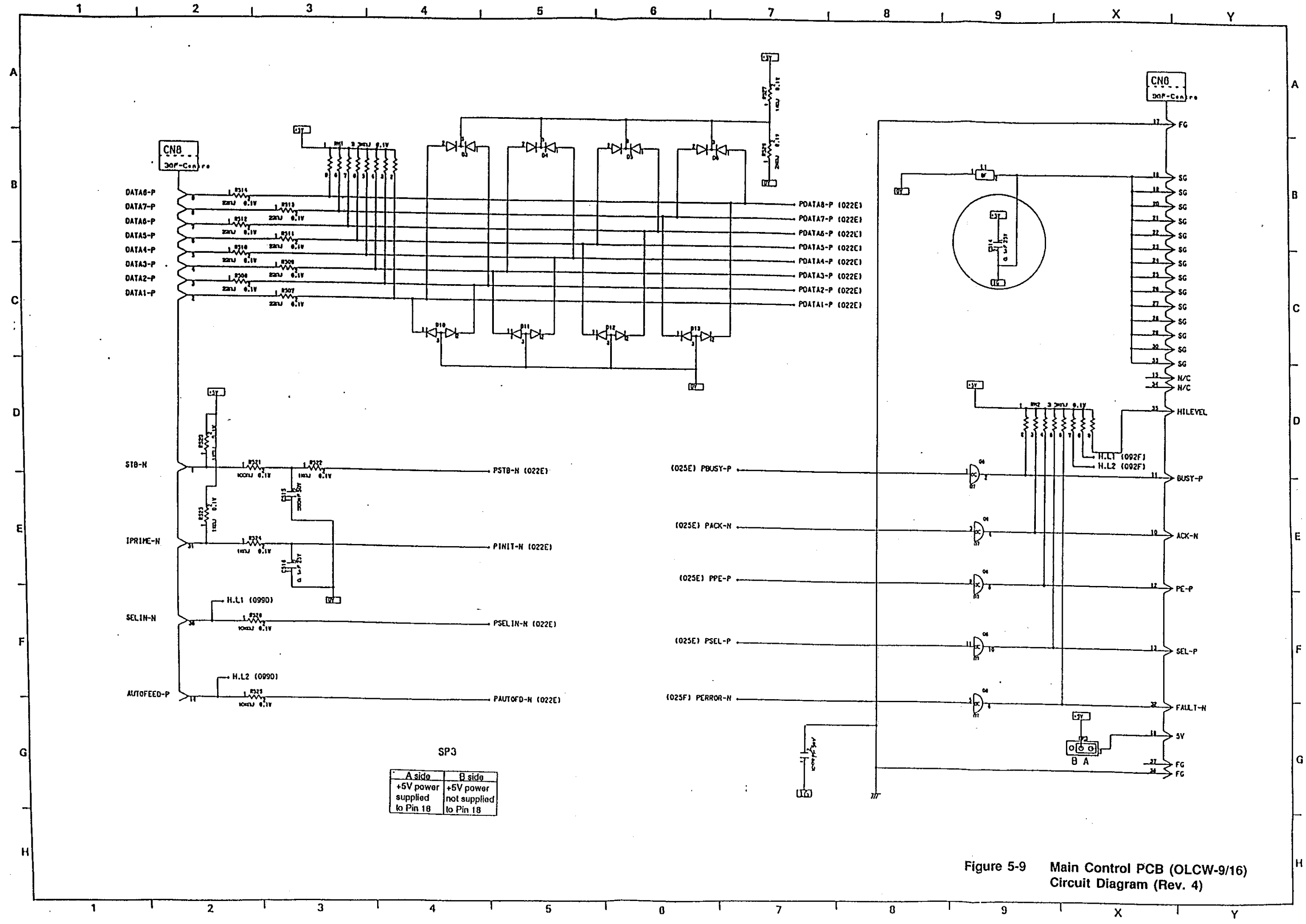


Figure 5-8 Main Control PCB (OLCW-8/16) Circuit Diagram (Rev. 4)



SP3

A side	B side
+5V power supplied to Pin 18	+5V power not supplied to Pin 18

Figure 5-9 Main Control PCB (OLCW-9/16) Circuit Diagram (Rev. 4)

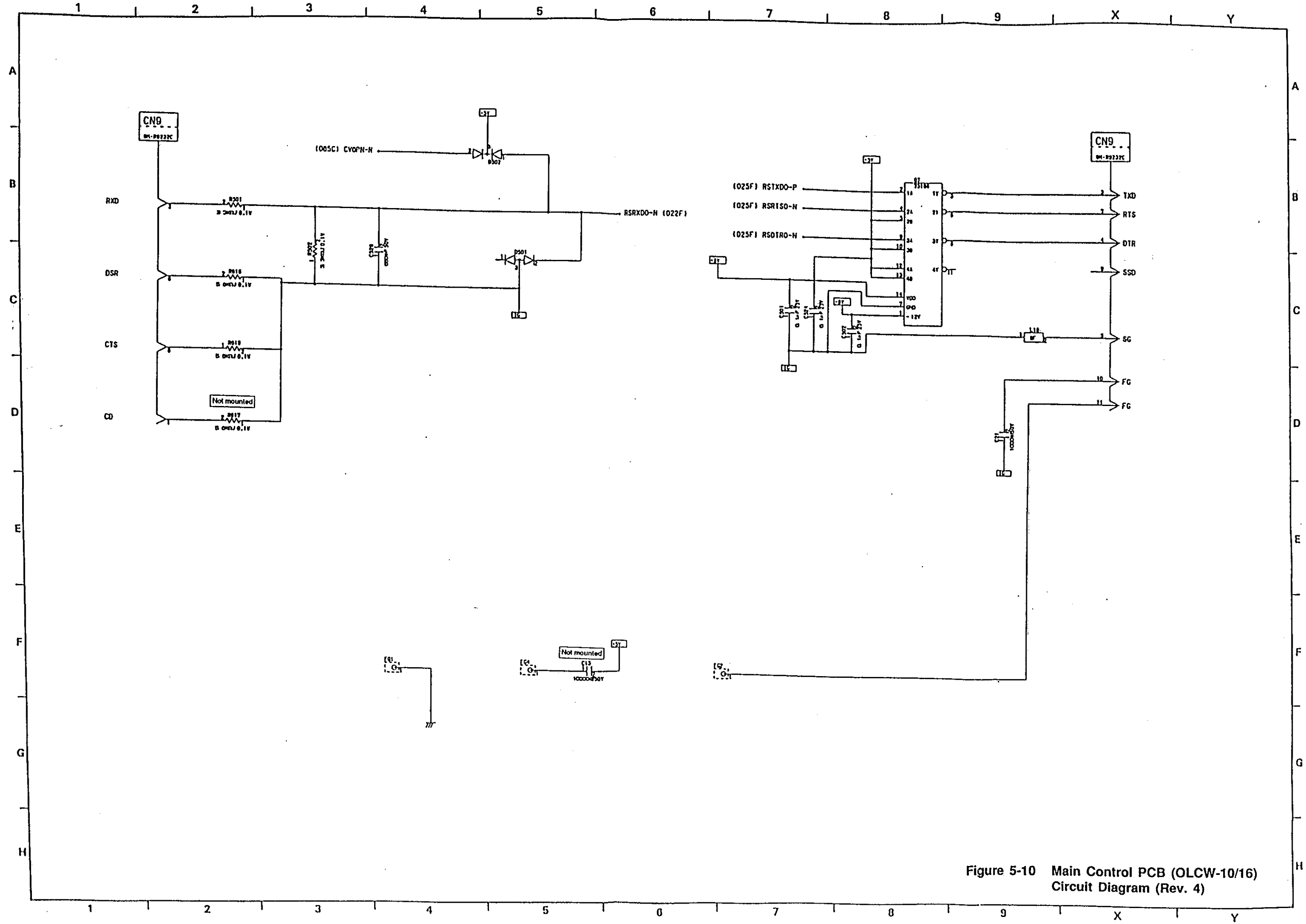


Figure 5-10 Main Control PCB (OLCW-10/16) Circuit Diagram (Rev. 4)

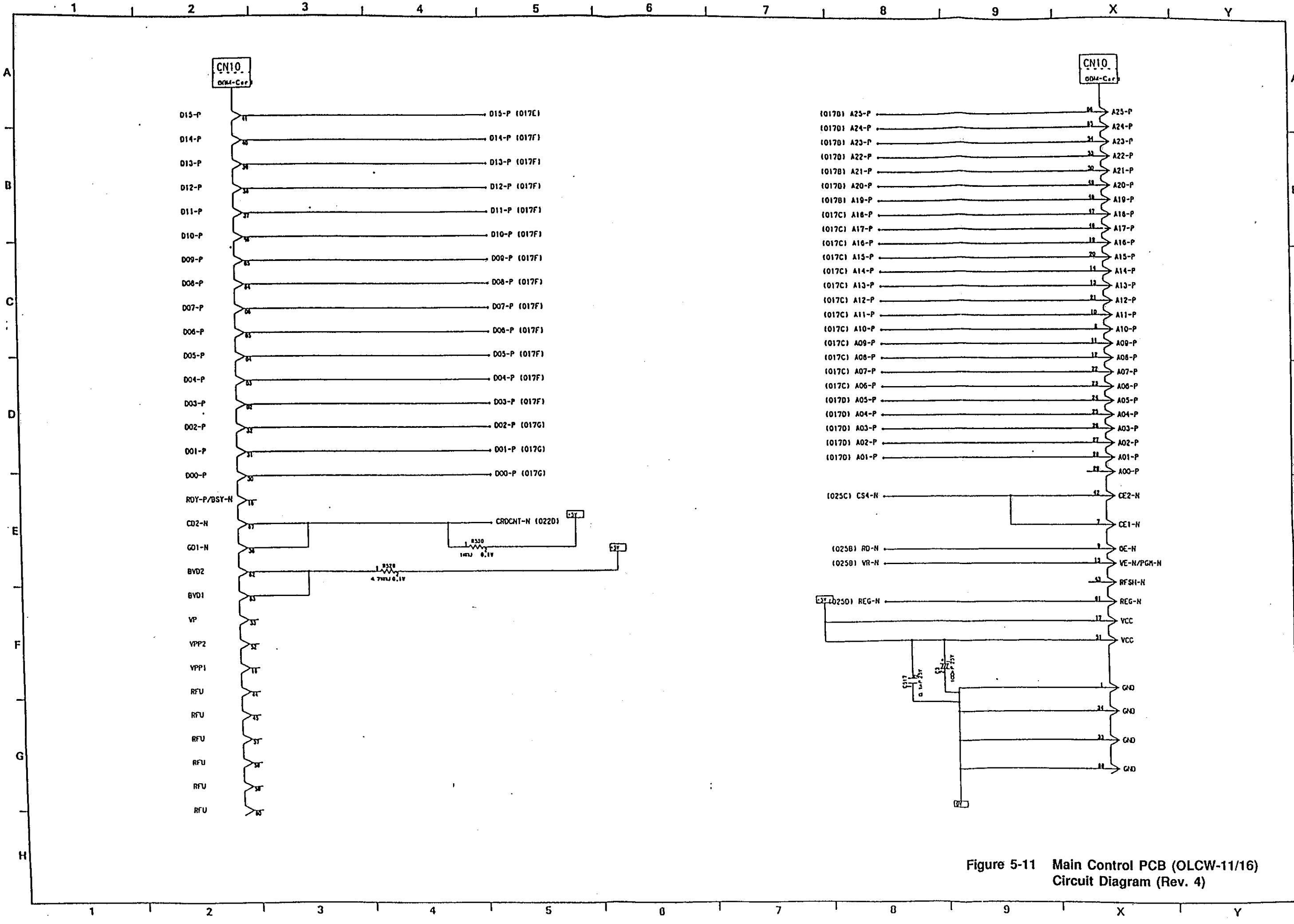


Figure 5-11 Main Control PCB (OLCW-11/16) Circuit Diagram (Rev. 4)

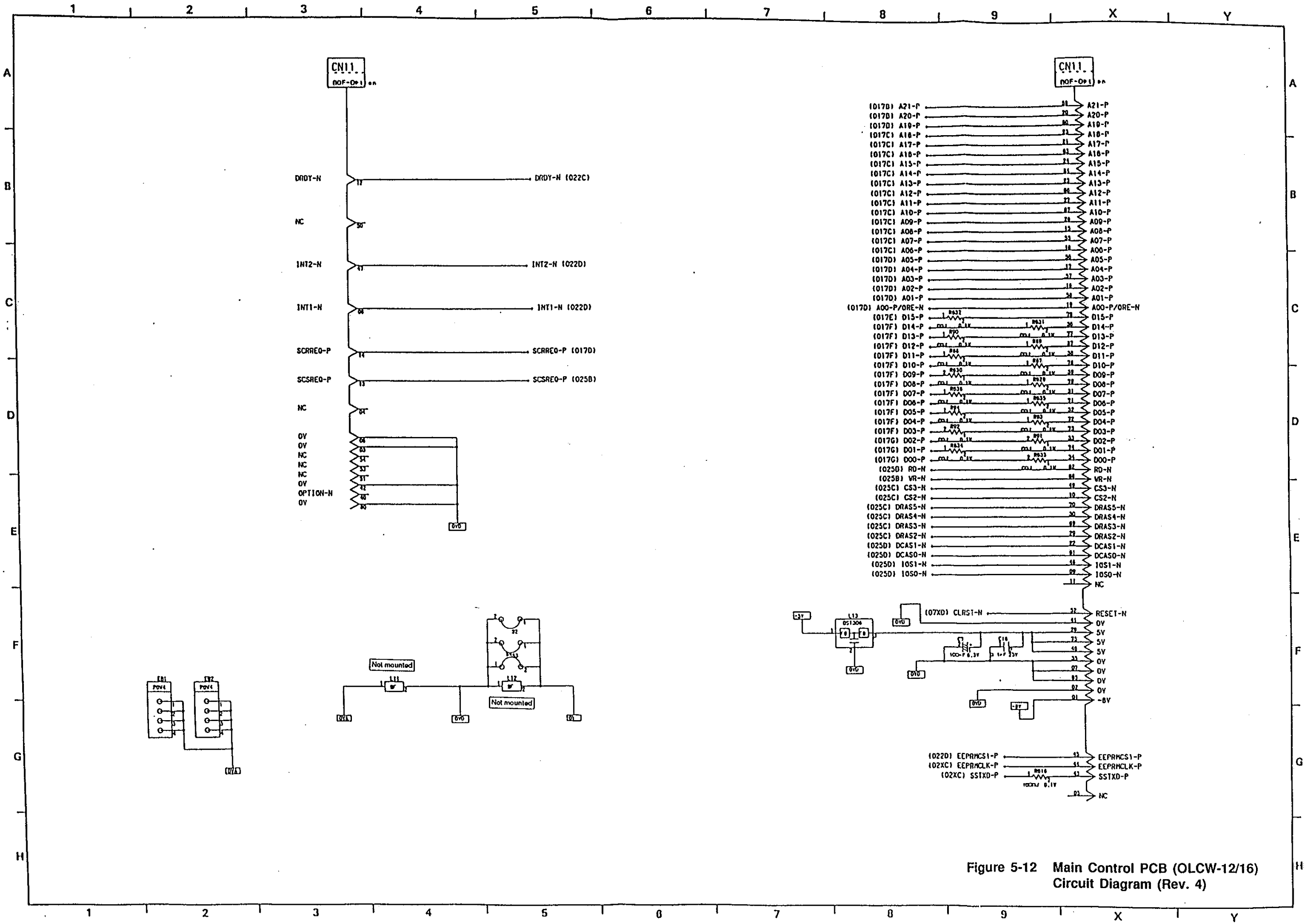


Figure 5-12 Main Control PCB (OLCW-12/16) Circuit Diagram (Rev. 4)

Connector Name: 14F-LED
Part Number: 224A3590P0140
Part Symbol: CN4

Pin No.	Signal Name	Location	
1	0V	057G	
2	0V	057G	
3	5V	057F	
4	5V	057F	
5	0V	057G	
6	HDDTO-P	057B	
7	NC	057B	
8	HDCLK-P	057C	
9	HDLD-P	057C	
10	STB1-N	057C	
11	STB2-N	057D	
12	STB3-N	057D	
13	STB4-N	057D	
14	FG	057H	

Connector Name: 32M-Power
Part Number: 224A3368P0320
Part Symbol: CN7

Pin No.	Signal Name	Location	
1	TRSEL2-P	08YG	
2	TRSEL1-P	08YF	
3	NC	082F	
4	+30V	082C	
5	THERM	082C	
6	CVOPN-N	082C	
7	VRSNS-N	082B	
8	TNRSNS-N	082C	
9	PAPER-N	082C	
10	PSOUT-N	082C	
11	+5V	082D	
12	+5V	082D	
13	0V	082D	
14	0V	082D	
15	0V	082D	
16	PSIN1-N	082B	
17	0V	082E	
18	PSIN2-N	082B	
19	0V	082E	
20	HEATON-N	08YF	
21	0V	082E	
22	TR1	08YB	
23	0V	082E	
24	DB1	08YD	
25	CH	08YC	
26	+5V	082D	
27	TR2	08YB	
28	-8V	082E	
29	DB2	08YE	
30	+8V	082D	
31	OVP	082E	
32	+38V	082C	
33	NC	082F	
34	NC	082F	

Connector Name: 36F-Centro
Part Number: 220A1763P0360
Part Symbol: CN8

Pin No.	Signal Name	Location	
1	STB-N	092D	
2	DATA1-P	092C	
3	DATA2-P	092C	
4	DATA3-P	092C	
5	DATA4-P	092C	
6	DATA5-P	092C	
7	DATA6-P	092B	
8	DATA7-P	092B	
9	DATA8-P	092B	
10	ACK-N	09XE	
11	BUSY-P	09XD	
12	PE-P	09XE	
13	SEL-P	09XF	
14	AUTOFEED-P	092F	
15	N/C	09XD	
16	SG	09XB	
17	FG	09XA	
18	5V	09XG	
19	SG	09XB	
20	SG	09XB	
21	SG	09XB	
22	SG	09XB	
23	SG	09XC	
24	SG	09XC	
25	SG	09XC	
26	SG	09XC	
27	SG	09XC	
28	SG	09XC	
29	SG	09XC	
30	SG	09XC	
31	IPRIME-N	092E	
32	FAULT-N	09XF	
33	SG	09XC	
34	N/C	09XD	
35	HILEVEL	09XD	
36	SELIN-N	092F	
37	FG	09XG	
38	FG	09XG	

Connector Name: 3M-Fan
Part Number: 224A3530P0030
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	FANPOW	0490	
2	OVP	0490	
3	FANALM-N	04XC	

Figure 5-13 Main Control PCB (OLCW-13/16) Circuit Diagram (Rev. 4)

Connector Name: 4M-DMotor
Part Number: 224A3357P0040
Part Symbol: CN2

Pin No.	Signal Name	Location	
1	DMPH1-N	049D	
2	DMPH1-P	049D	
3	DMPH2-N	049E	
4	DMPH2-P	049D	

Connector Name: 4M-RMotor
Part Number: 224A3357P0040
Part Symbol: CN3

Pin No.	Signal Name	Location	
1	RMPH1-N	049E	
2	RMPH1-P	049E	
3	RMPH2-N	049F	
4	RMPH2-P	049F	

Connector Name: 66M-Card
Part Number: 224A0121P0680
Part Symbol: CN10

Pin No.	Signal Name	Location	
1	GND	11XF	
02	D03-P	113D	
03	D04-P	113D	
04	D05-P	113C	
05	D06-P	113C	
06	D07-P	113C	
7	CE1-N	11XE	
8	A10-P	11XC	
9	OE-N	11XE	
10	A11-P	11XC	
11	A09-P	11XC	
12	A08-P	11XC	
13	A13-P	11XC	
14	A14-P	11XC	
15	WE-N/PGM-N	11XE	
16	RDY-P/BSY-N	113E	
17	VCC	11XF	
18	VPP1	113F	
19	A16-P	11XC	
20	A15-P	11XC	
21	A12-P	11XC	
22	A07-P	11XD	
23	A06-P	11XD	
24	A05-P	11XD	
25	A04-P	11XD	
26	A03-P	11XD	
27	A02-P	11XD	
28	A01-P	11XD	
29	A00-P	11XD	
30	D00-P	113D	
31	D01-P	113D	
32	D02-P	113D	
33	VP	113F	
34	GND	11XF	
35	GND	11XG	
36	GD1-N	113E	
37	D11-P	113B	
38	D12-P	113B	
39	D13-P	113B	
40	D14-P	113B	
41	D15-P	113A	
42	CE2-N	11XE	
43	RFSH-N	11XE	
44	RFU	113F	
45	RFU	113F	
46	A17-P	11XB	
47	A18-P	11XB	
48	A19-P	11XB	
49	A20-P	11XB	
50	A21-P	11XB	

Pin No.	Signal Name	Location	
51	VCC	11XF	
52	VPP2	113F	
53	A22-P	11XB	
54	A23-P	11XB	
55	A24-P	11XB	
56	A25-P	11XA	
57	RFU	113G	
58	RFU	113G	
59	RFU	113G	
60	RFU	113G	
61	REG-N	11XF	
62	BVD2	113E	
63	BVD1	113E	
64	D08-P	113C	
65	D09-P	113C	
66	D10-P	113B	
67	CD2-N	113E	
68	GND	11XG	

Figure 5-14 Main Control PCB (OLCW-14/16) Circuit Diagram (Rev. 4)

Connector Name: 7F-OPanel
Part Number: 224A3590P0060
Part Symbol: CN5

Pin No.	Signal Name	Location	
1	OPLD-N	068B	
2	0V	068C	
3	OPDTOUT-P	068B	
4	OPDTIN-P	069B	
5	5V	068C	
6	OPCLK-N	068B	
7	0V	068C	

Connector Name: 80F-Option
Part Number: 224A3516P0000
Part Symbol: CN11

Pin No.	Signal Name	Location	
01	-0V	129F	
02	0V	129F	
03	0V	123D	
04	NC	123D	
05	NC	129G	
06	0V	123D	
07	0V	129F	
08	INT1-N	123C	
09	IOSO-N	129E	
10	CS2-N	129D	
11	BGNT-P	129E	
12	DRDY-N	123B	
13	SCSREQ-P	123C	
14	SCRREQ-P	123C	
15	A08-P	129B	
16	A06-P	129B	
17	A04-P	129C	
18	A02-P	129C	
19	A00-P/ORE-N	129C	
20	A20-P	129A	
21	A17-P	129A	
22	DCAS1-N	129E	
23	A18-P	129A	
24	A15-P	129B	
25	A13-P	129B	
26	5V	129F	
27	A11-P	129B	
28	A09-P	129B	
29	DRAS2-N	129E	
30	DRAS4-N	129E	
31	D07-P	129D	
32	D05-P	129D	
33	D02-P	129D	
34	D00-P	129D	
35	0V	129F	
36	D14-P	129C	
37	D12-P	129C	
38	D11-P	129C	
39	D09-P	129C	
40	OPTION-N	123D	
41	0V	129E	
42	0V	123D	
43	SSTXD-P	129G	
44	EEPRMCLK-P	129G	
45	EEPRMCS1-P	129G	
46	5V	129F	
47	INT2-N	123B	
48	IOS1-N	129E	
49	CS3-N	129D	
50	BREQ-N	123B	

Pin No.	Signal Name	Location	
51	NC	123D	
52	RESET-N	129E	
53	NC	123D	
54	NC	123D	
55	A07-P	129B	
56	A05-P	129B	
57	A03-P	129C	
58	A01-P	129C	
59	A21-P	129A	
60	A19-P	129A	
61	DCAS0-N	129E	
62	RD-N	129D	
63	A16-P	129B	
64	A14-P	129B	
65	0V	129F	
66	A12-P	129B	
67	A10-P	129B	
68	WR-N	129D	
69	DRAS3-N	129E	
70	DRAS5-N	129E	
71	D06-P	129D	
72	D04-P	129D	
73	D03-P	129D	
74	D01-P	129D	
75	5V	129F	
76	D15-P	129C	
77	D13-P	129C	
78	D10-P	129C	
79	D08-P	129C	
80	0V	123D	

Connector Name: 8F-OptFdr
Part Number: 221A1630P0081
Part Symbol: CN6

Pin No.	Signal Name	Location	
1	FG	068F	
2	EVLSCLK-N	060E	
3	EVLSD-N	060D	
4	EVLSDP-N	069E	
5	0VP	060F	
6	30V	068E	
7	0V	068F	
8	5V	068F	
9	FG	068G	
10	FG	068G	
11	FG	068G	

Figure 5-15 Main Control PCB (OLCW-15/16) Circuit Diagram (Rev. 4)

Connector Name: 9M-RS232C
Part Number: 220A1376P0093
Part Symbol: CN9

Pin No.	Signal Name	Location	
1	CD	102D	
2	RXD	102C	
3	TXD	10XB	
4	DTR	10XC	
5	SG	10XD	
6	DSR	102C	
7	RTS	10XC	
8	CTS	102D	
9	SSD	10XC	
10	FG	10XD	
11	FG	10XD	

Figure 5-16 Main Control PCB (OLCW-16/16) Circuit Diagram (Rev. 4)

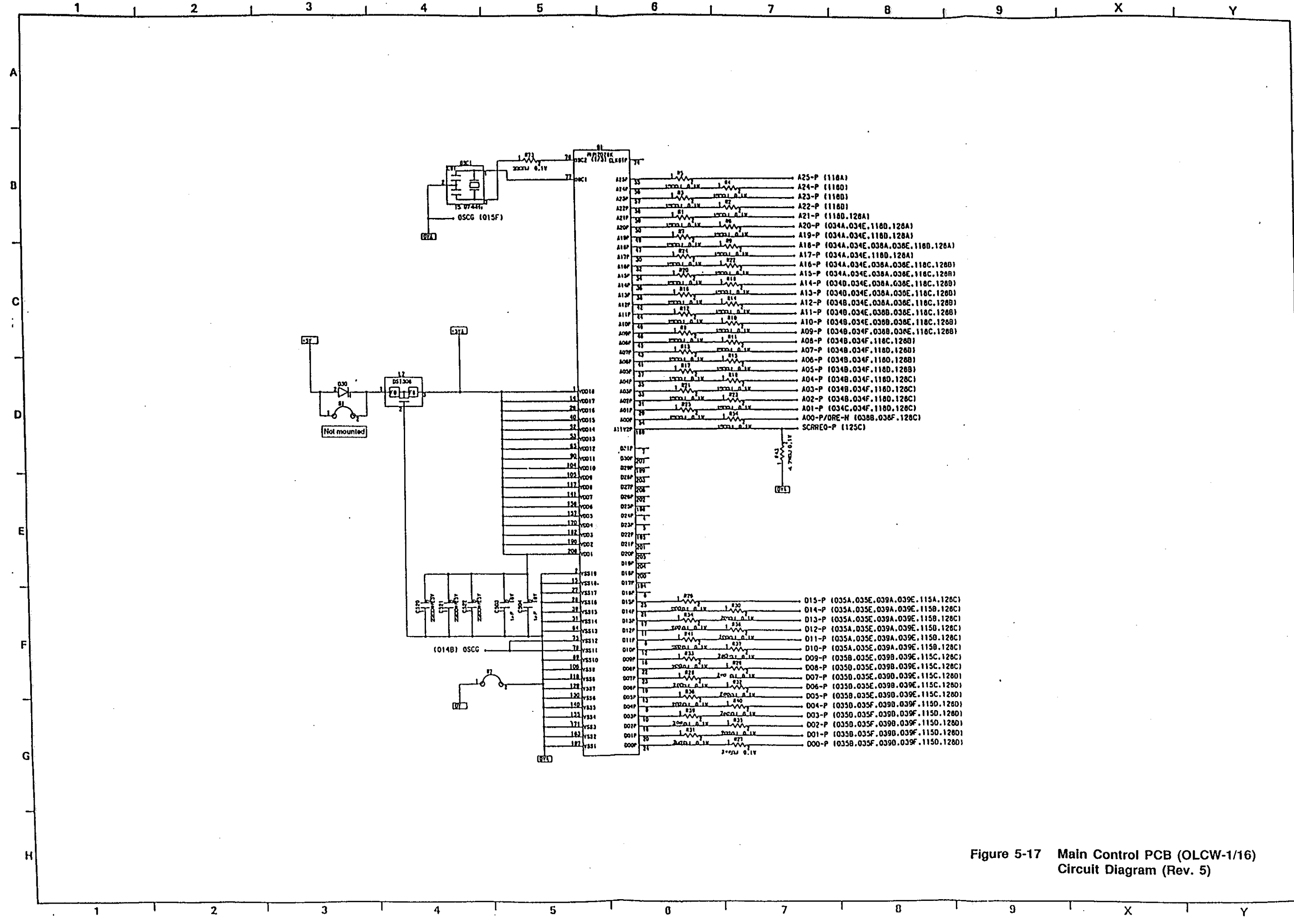


Figure 5-17 Main Control PCB (OLCW-1/16) Circuit Diagram (Rev. 5)

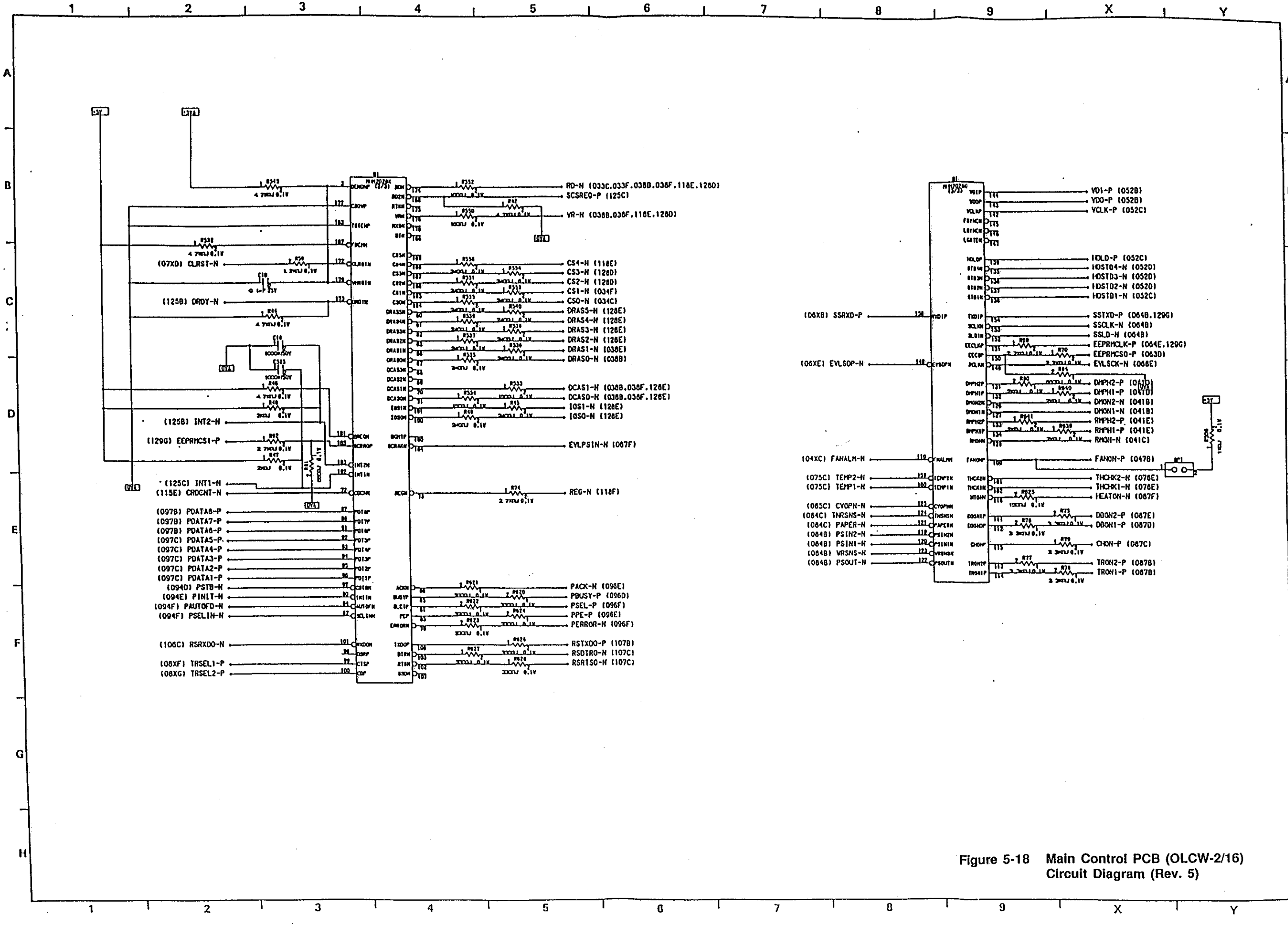


Figure 5-18 Main Control PCB (OLCW-2/16) Circuit Diagram (Rev. 5)

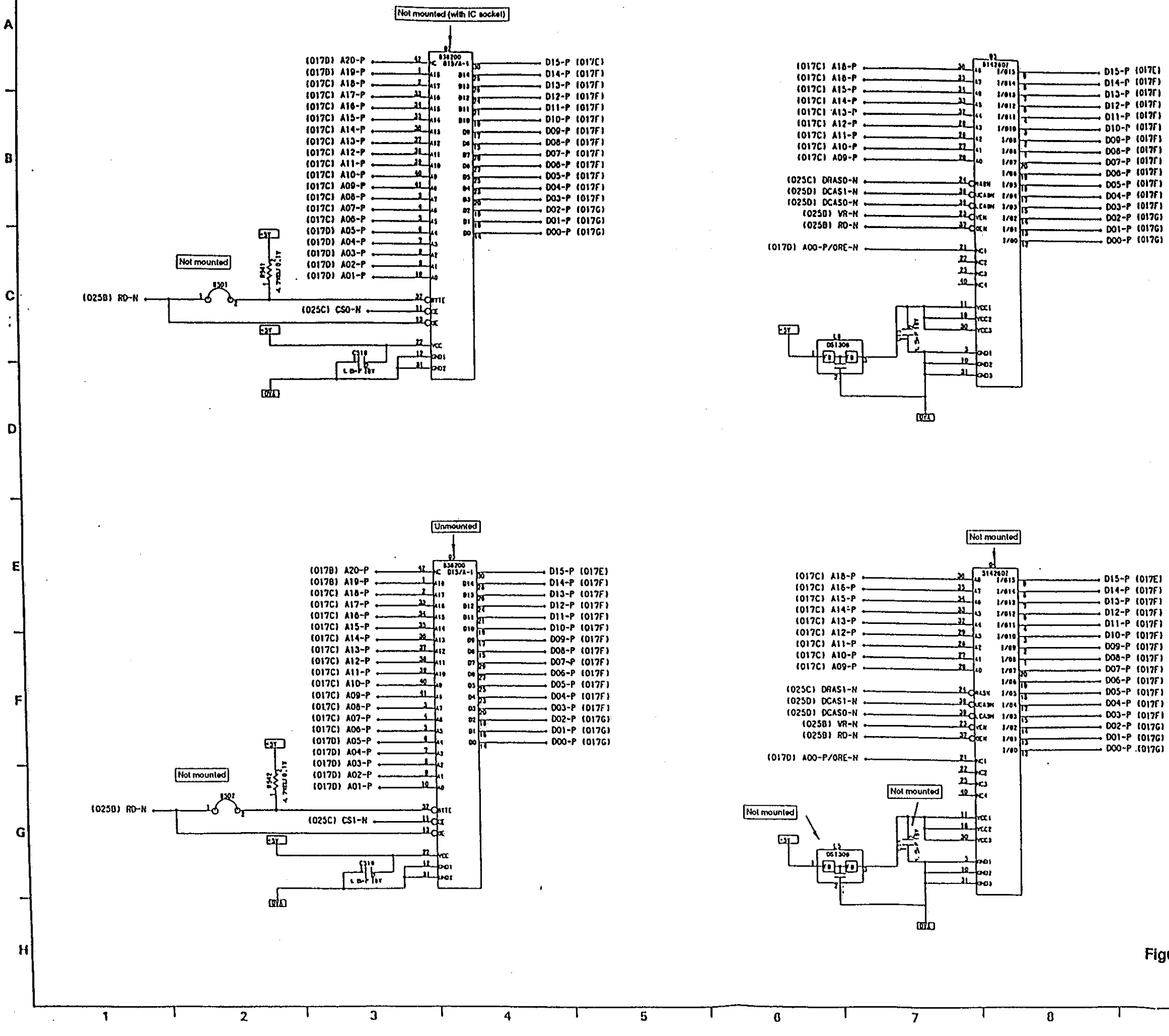


Figure 5-19 Main Control PCB (OLCW-3/16) Circuit Diagram (Rev. 5)

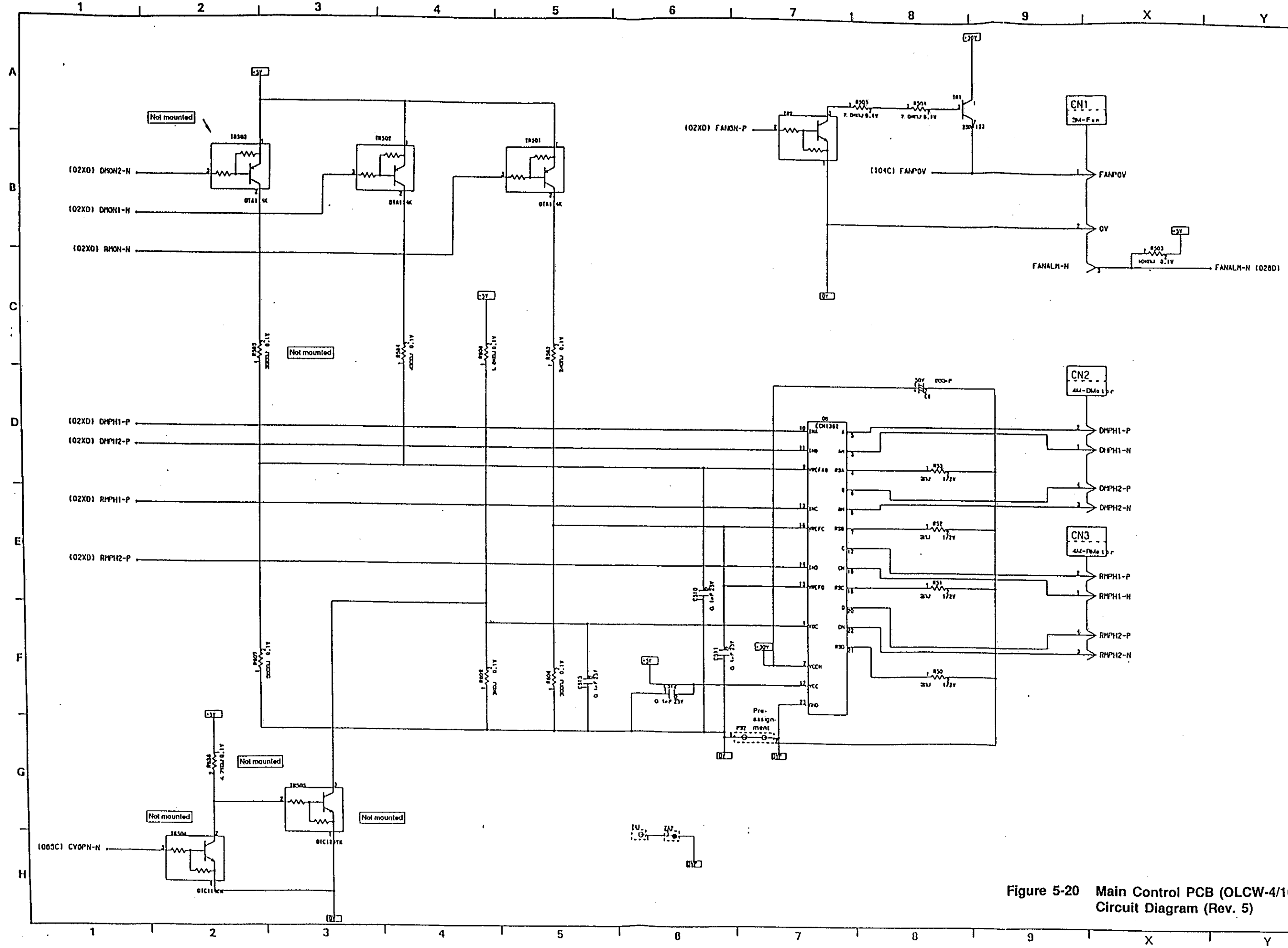


Figure 5-20 Main Control PCB (OLCW-4/16) Circuit Diagram (Rev. 5)

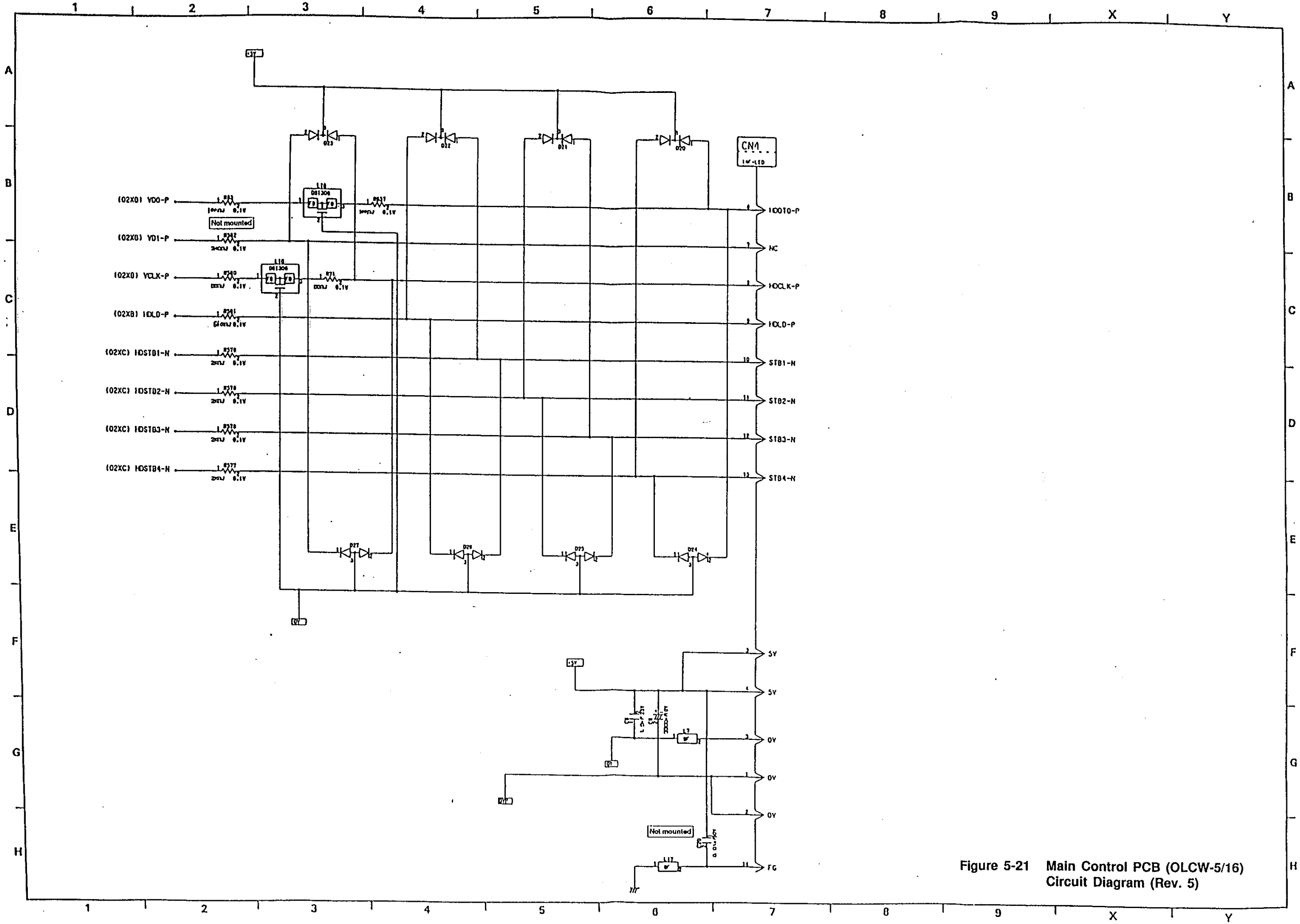


Figure 5-21 Main Control PCB (OLCW-5/16) Circuit Diagram (Rev. 5)

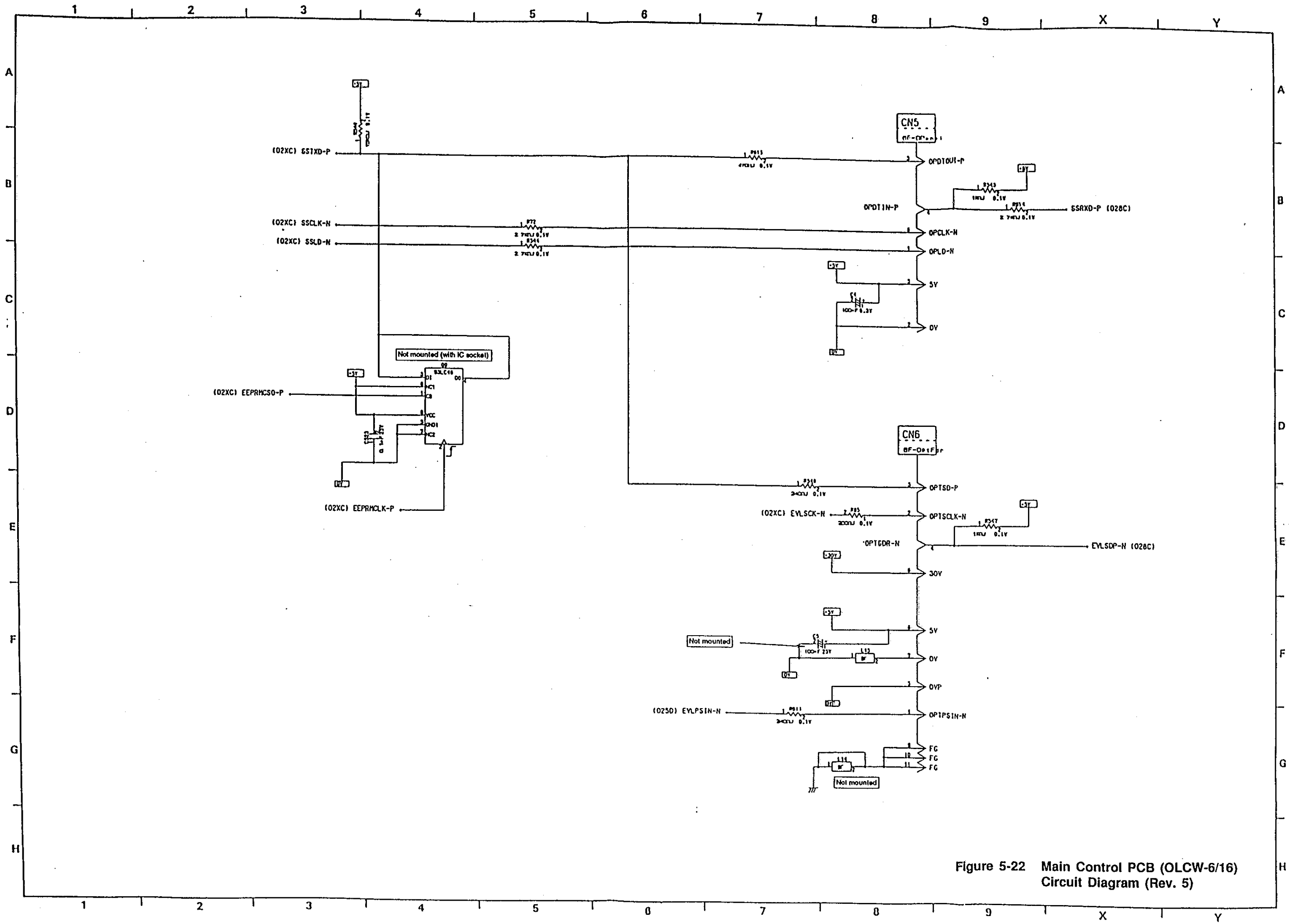


Figure 5-22 Main Control PCB (OLCW-6/16) Circuit Diagram (Rev. 5)

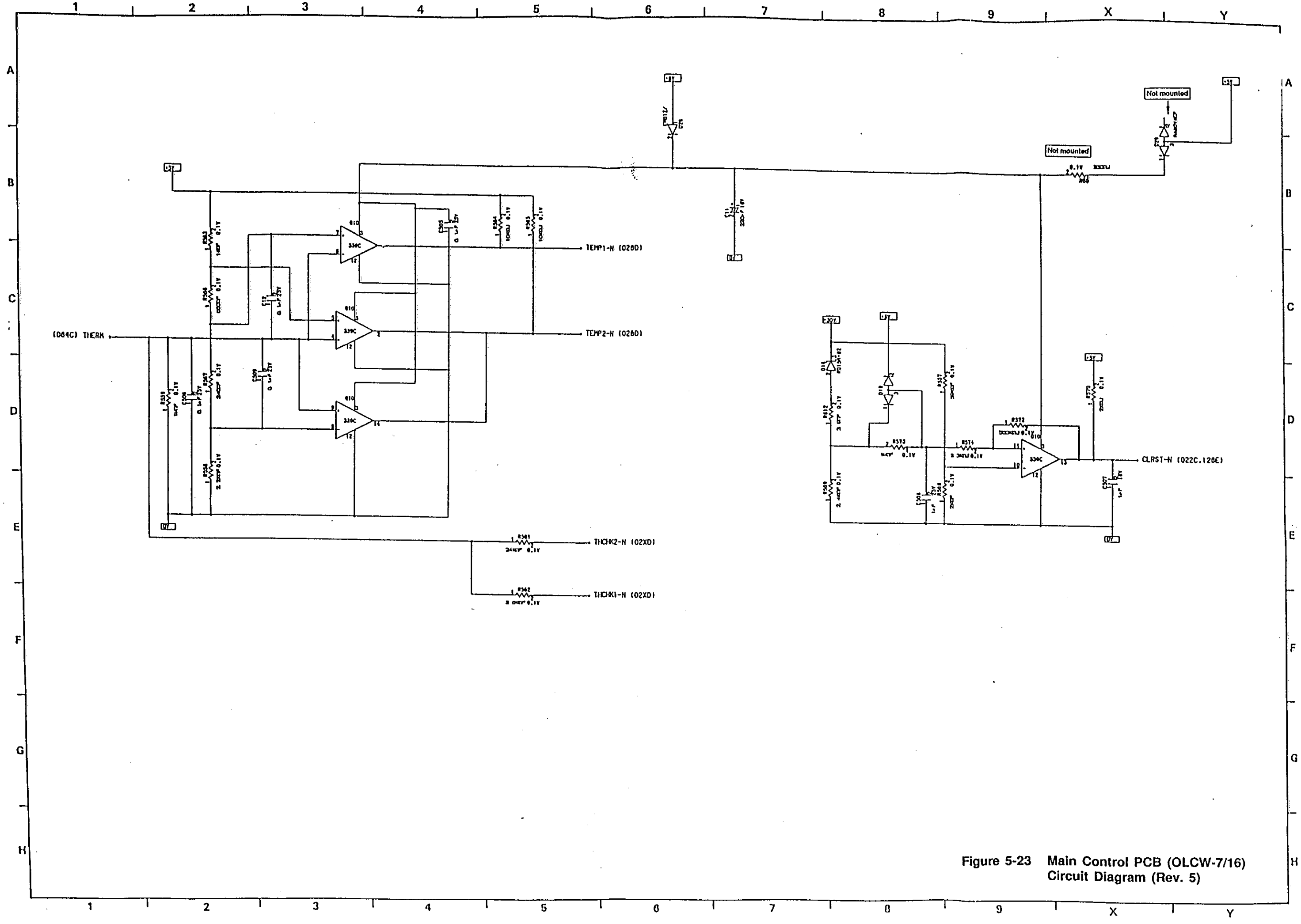


Figure 5-23 Main Control PCB (OLCW-7/16) Circuit Diagram (Rev. 5)

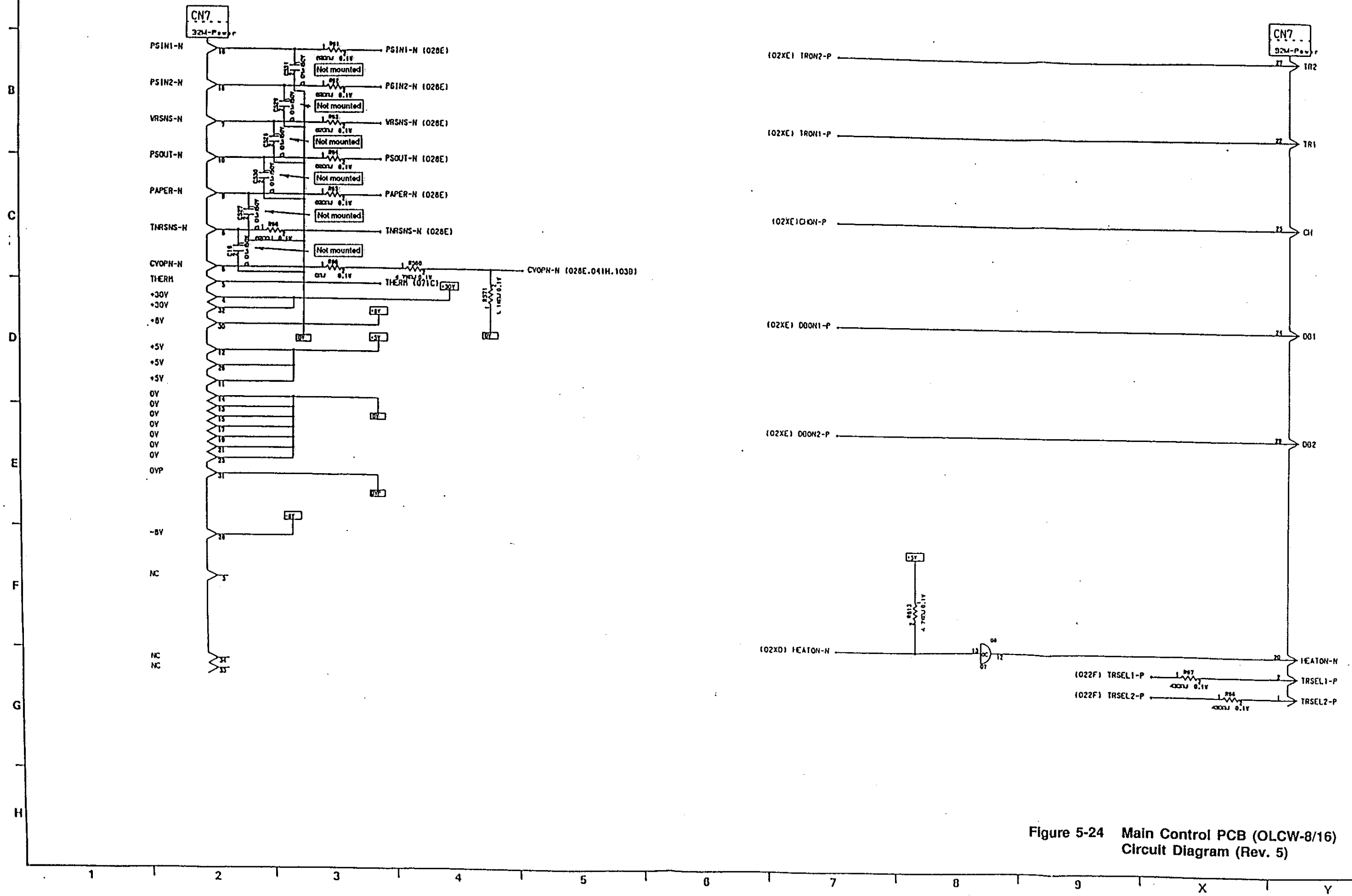
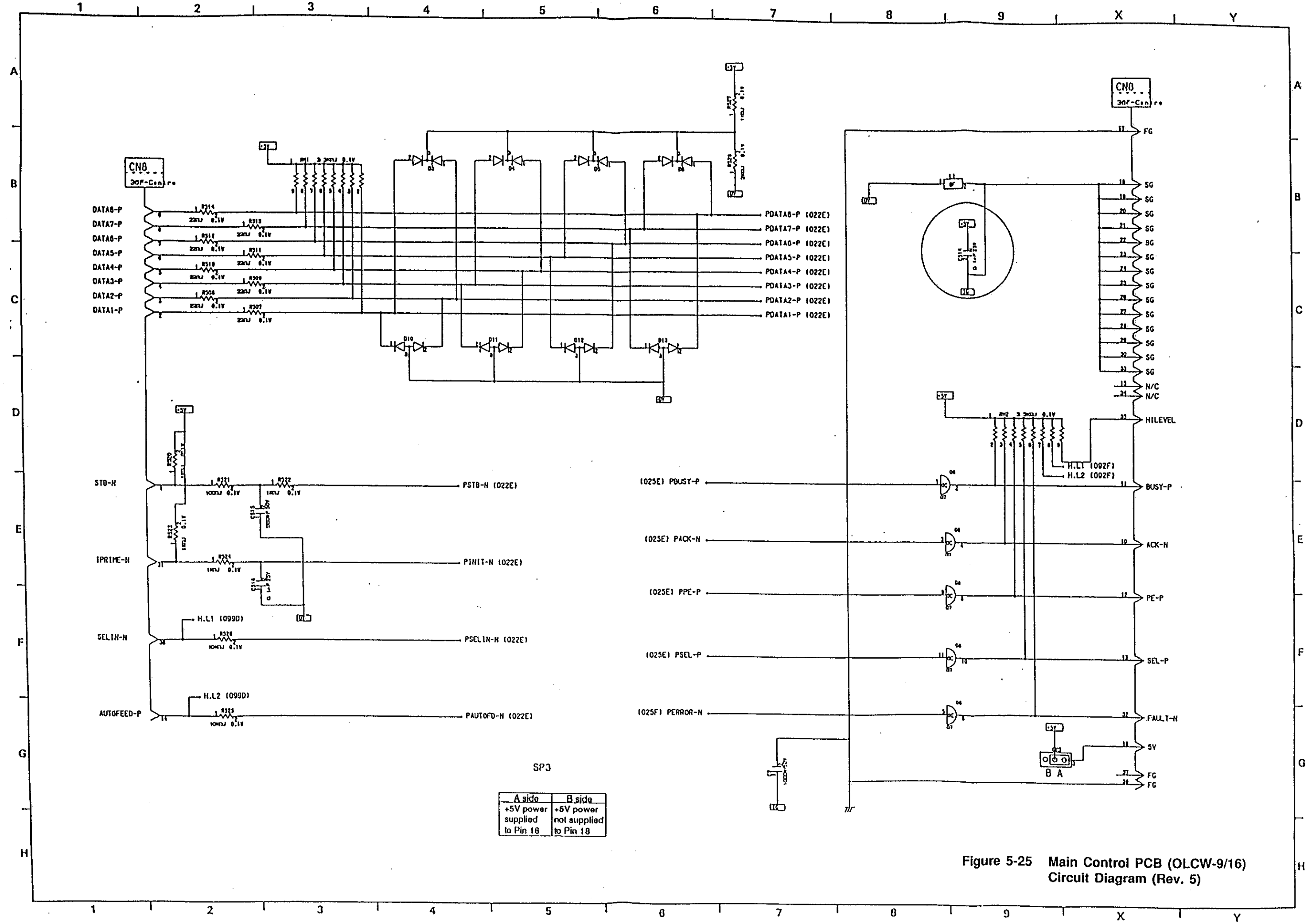


Figure 5-24 Main Control PCB (OLCW-8/16) Circuit Diagram (Rev. 5)



SP3

A side	B side
+5V power supplied to Pin 18	+5V power not supplied to Pin 18

Figure 5-25 Main Control PCB (OLCW-9/16) Circuit Diagram (Rev. 5)

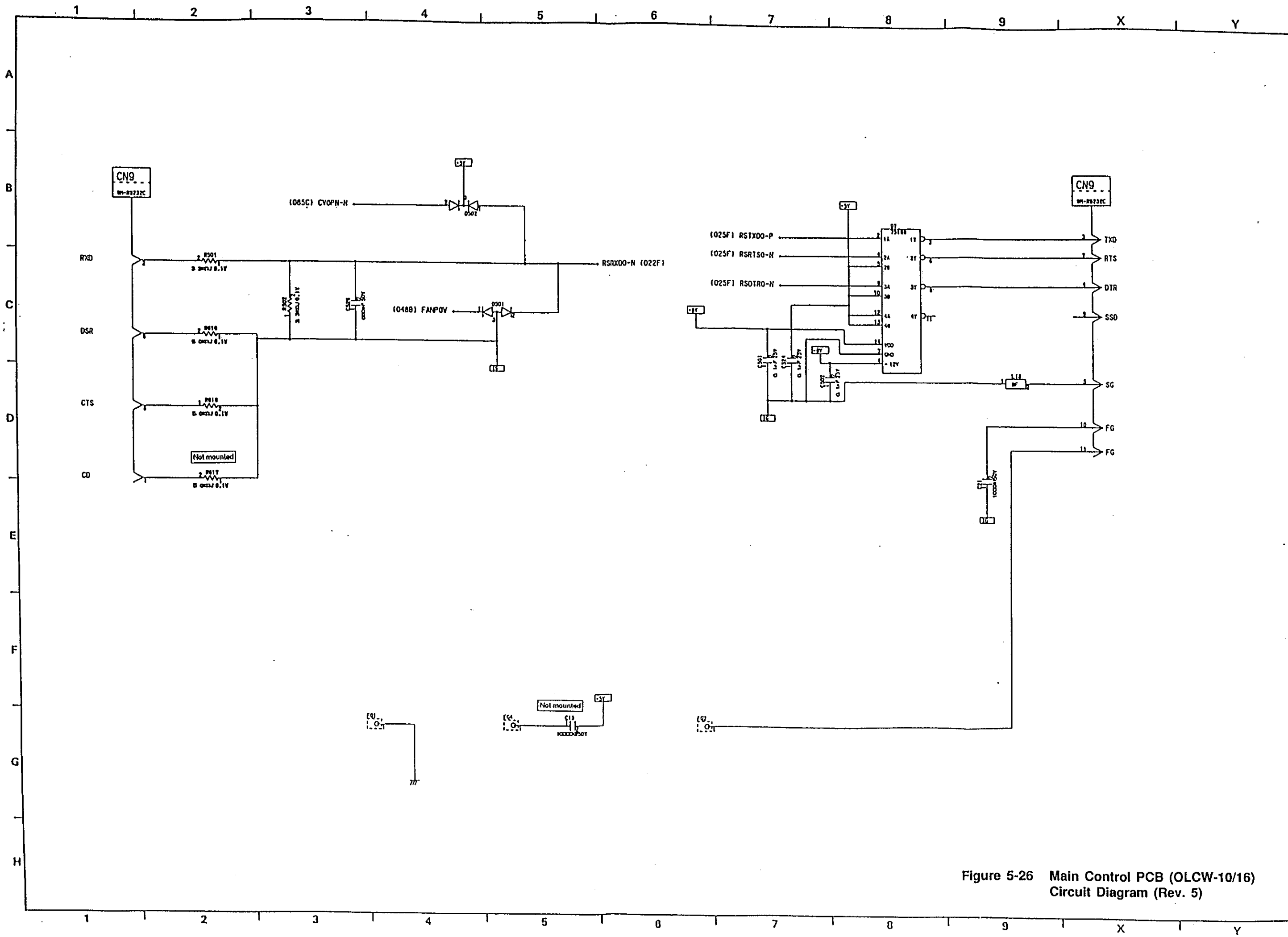


Figure 5-26 Main Control PCB (OLCW-10/16) Circuit Diagram (Rev. 5)

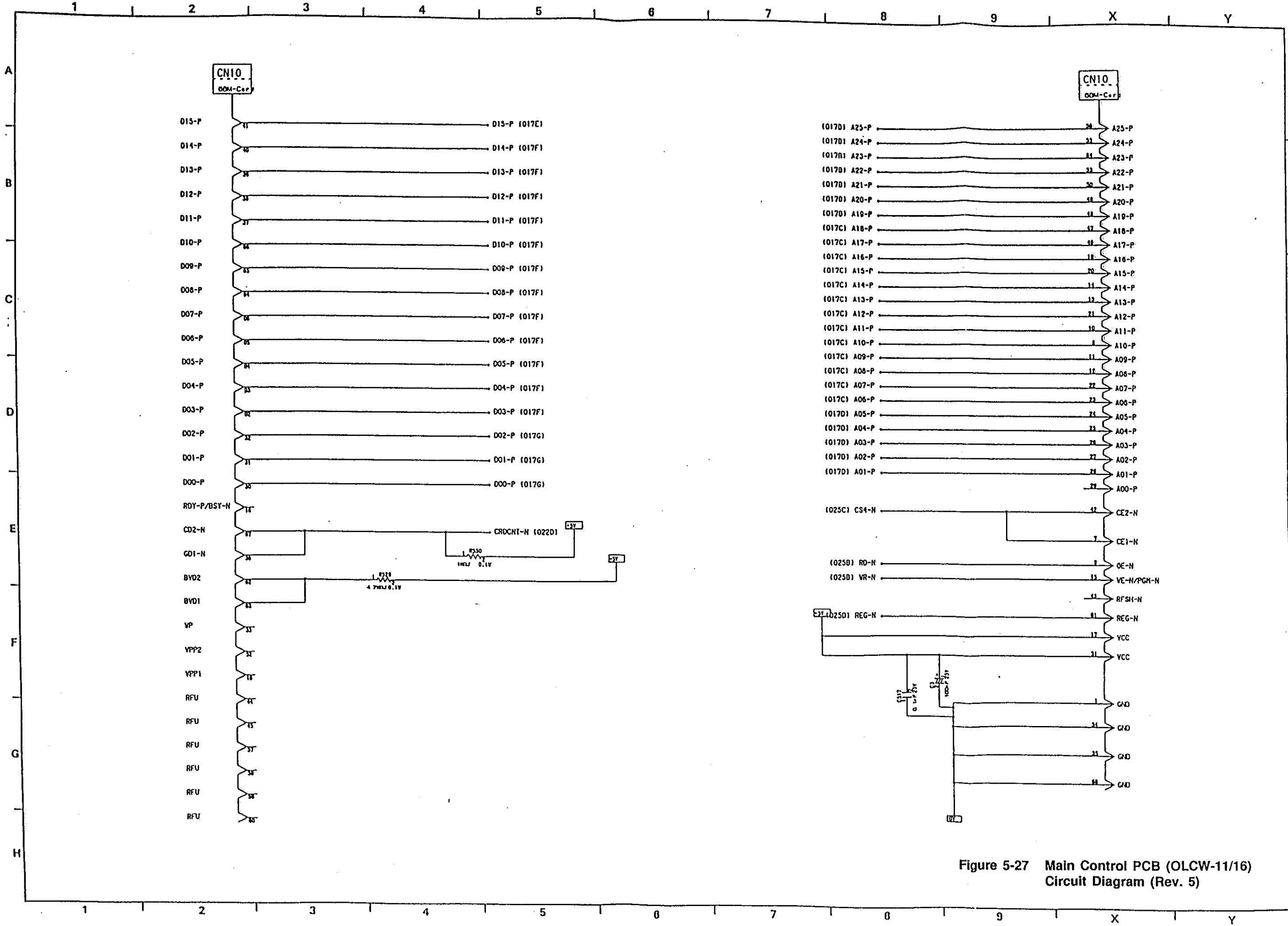


Figure 5-27 Main Control PCB (OLCW-11/16) Circuit Diagram (Rev. 5)

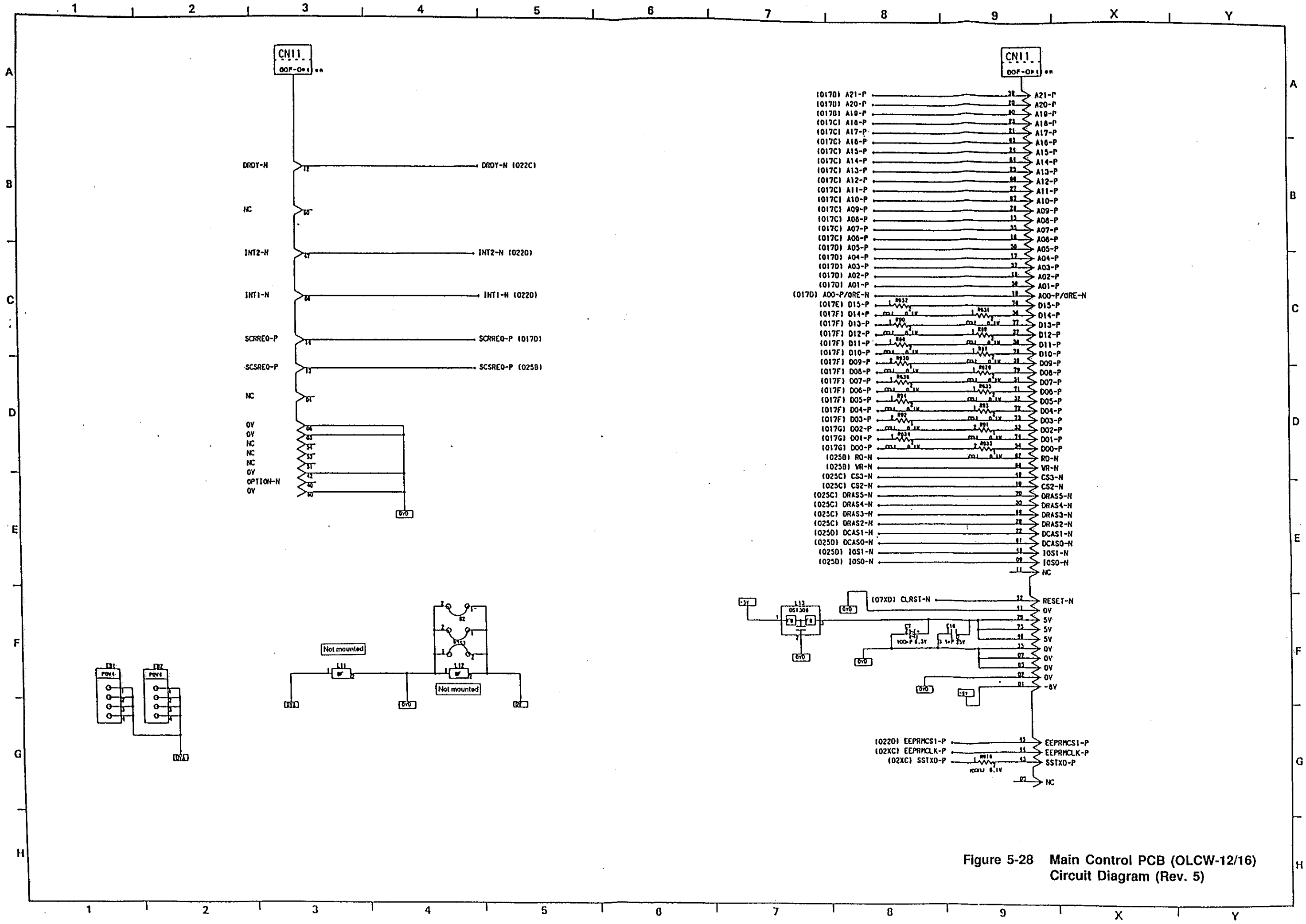


Figure 5-28 Main Control PCB (OLCW-12/16) Circuit Diagram (Rev. 5)

Connector Name: 14F-LED
Part Number: 224A3590P0140
Part Symbol: CN4

Pin No.	Signal Name	Location	
1	0V	057G	
2	0V	057G	
3	5V	057F	
4	5V	057F	
5	0V	057G	
6	HDDTO-P	057B	
7	NC	057B	
8	HDCLK-P	057C	
9	HDLD-P	057C	
10	STB1-N	057C	
11	STB2-N	057D	
12	STB3-N	057D	
13	STB4-N	057D	
14	FG	057H	

Connector Name: 32M-Power
Part Number: 224A3368P0320
Part Symbol: CN7

Pin No.	Signal Name	Location	
1	TRSEL2-P	08YG	
2	TRSEL1-P	08YF	
3	NC	082F	
4	+30V	082D	
5	THERM	082C	
6	CV0PN-N	082C	
7	VRSNS-N	082B	
8	TNRSNS-N	082C	
9	PAPER-N	082C	
10	PSOUT-N	082B	
11	+5V	082D	
12	+5V	082D	
13	0V	082D	
14	0V	082D	
15	0V	082D	
16	PSIN1-N	082B	
17	0V	082E	
18	PSIN2-N	082B	
19	0V	082E	
20	HEATON-N	08YF	
21	0V	082E	
22	TR1	08YB	
23	0V	082E	
24	DB1	08YD	
25	CH	08YC	
26	+5V	082D	
27	TR2	08YB	
28	-8V	082E	
29	DB2	08YE	
30	+8V	082D	
31	OVP	082E	
32	+30V	082D	
33	NC	082F	
34	NC	082F	

Connector Name: 36F-Centro
Part Number: 220A1783P0360
Part Symbol: CN8

Pin No.	Signal Name	Location	
1	STB-N	092D	
2	DATA1-P	092C	
3	DATA2-P	092C	
4	DATA3-P	092C	
5	DATA4-P	092C	
6	DATA5-P	092C	
7	DATA6-P	092B	
8	DATA7-P	092B	
9	DATA8-P	092B	
10	ACK-N	09XE	
11	BUSY-P	09XD	
12	PE-P	09XE	
13	SEL-P	09XF	
14	AUTOFEED-P	092F	
15	N/C	09XD	
16	SG	09XB	
17	FG	09XA	
18	5V	09XG	
19	SG	09XB	
20	SG	09XB	
21	SG	09XB	
22	SG	09XB	
23	SG	09XC	
24	SG	09XC	
25	SG	09XC	
26	SG	09XC	
27	SG	09XC	
28	SG	09XC	
29	SG	09XC	
30	SG	09XC	
31	IPRIME-N	092E	
32	FAULT-N	09XF	
33	SG	09XC	
34	N/C	09XD	
35	HILEVEL	09XD	
36	SELIN-N	092F	
37	FG	09XG	
38	FG	09XG	

Connector Name: 3M-Fan
Part Number: 224A3528P0030
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	FANPOW	049B	
2	0V	049B	
3	FANALM-N	04XC	

Figure 5-29 Main Control PCB (OLCW-13/16) Circuit Diagram (Rev. 5)

Connector Name: 4M-DMotor
Part Number: 224A3357P0040
Part Symbol: CN2

Pin No.	Signal Name	Location	
1	DMPH1-N	049D	
2	DMPH1-P	049D	
3	DMPH2-N	049E	
4	DMPH2-P	049D	

Connector Name: 4M-RMotor
Part Number: 224A3357P0040
Part Symbol: CN3

Pin No.	Signal Name	Location	
1	RMPH1-N	049E	
2	RMPH1-P	049E	
3	RMPH2-N	049F	
4	RMPH2-P	049F	

Connector Name: 66M-Card
Part Number: 224A0121P0680
Part Symbol: CN10

Pin No.	Signal Name	Location	
1.	GND	11XF	
02	D03-P	113D	
03	D04-P	113D	
04	D05-P	113C	
05	D06-P	113C	
06	D07-P	113C	
7	CE1-N	11XE	
8	A10-P	11XC	
9	OE-N	11XE	
10	A11-P	11XC	
11	A09-P	11XC	
12	A08-P	11XC	
13	A13-P	11XC	
14	A14-P	11XC	
15	WE-N/PGM-N	11XE	
16	RDY-P/BSY-N	113E	
17	VCC	11XF	
18	VPP1	113F	
19	A16-P	11XC	
20	A15-P	11XC	
21	A12-P	11XC	
22	A07-P	11XD	
23	A06-P	11XD	
24	A05-P	11XD	
25	A04-P	11XD	
26	A03-P	11XD	
27	A02-P	11XD	
28	A01-P	11XD	
29	A00-P	11XD	
30	D00-P	113D	
31	D01-P	113D	
32	D02-P	113D	
33	WP	113F	
34	GND	11XF	
35	GND	11XG	
36	GD1-N	113E	
37	D11-P	113B	
38	D12-P	113B	
39	D13-P	113B	
40	D14-P	113B	
41	D15-P	113A	
42	CE2-N	11XE	
43	RFSH-N	11XE	
44	RFU	113F	
45	RFU	113F	
46	A17-P	11XB	
47	A18-P	11XB	
48	A19-P	11XD	
49	A20-P	11XB	
50	A21-P	11XB	

Pin No.	Signal Name	Location	
51	VCC	11XF	
52	VPP2	113F	
53	A22-P	11XB	
54	A23-P	11XB	
55	A24-P	11XB	
56	A25-P	11XA	
57	RFU	113G	
58	RFU	113G	
59	RFU	113G	
60	RFU	113G	
61	REG-N	11XF	
62	BVD2	113E	
63	BVD1	113E	
64	D08-P	113C	
65	D09-P	113C	
66	D10-P	113B	
67	CD2-N	113E	
68	GND	11XG	

Figure 5-30 Main Control PCB (OLCW-14/16) Circuit Diagram (Rev. 5)

Connector Name: 7F-OPanel
Part Number: 224A3590P0060

Pin No.	Signal Name	Location	
1	0PLD-N	068B	
2	0V	068C	
3	0PDT0UT-P	068B	
4	0PDT1N-P	069B	
5	5V	068C	
6	0PCLK-N	068B	

Connector Name: 80F-Option
Part Number: 224A3516P0800
Part Symbol: CN11

Pin No.	Signal Name	Location	
01	-8V	129F	
02	0V	129F	
03	0V	123D	
04	NC	123D	
05	NC	129G	
06	0V	123D	
07	0V	129F	
08	INT1-N	123C	
09	IOS0-N	129E	
10	CS2-N	129D	
11	NC	129E	
12	DRDY-N	123B	
13	SCSREQ-P	123C	
14	SCRREQ-P	123C	
15	A08-P	129B	
16	A06-P	129B	
17	A04-P	129C	
18	A02-P	129C	
19	A00-P/0RE-N	129C	
20	A20-P	129A	
21	A17-P	129A	
22	DCAS1-N	129E	
23	A18-P	129A	
24	A15-P	129B	
25	A13-P	129B	
26	5V	129F	
27	A11-P	129B	
28	A09-P	129B	
29	DRAS2-N	129E	
30	DRAS4-N	129E	
31	D07-P	129D	
32	D05-P	129D	
33	D02-P	129D	
34	D00-P	129D	
35	0V	129F	
36	D14-P	129C	
37	D12-P	129C	
38	D11-P	129C	
39	D09-P	129C	
40	0PTION-N	123D	
41	0V	129E	
42	0V	123D	
43	SSTXD-P	129G	
44	EEPRMCLK-P	129G	
45	EEPRMCS1-P	129G	
46	5V	129F	
47	INT2-N	123B	
48	IOS1-N	129E	
49	CS3-N	129D	
50	NC	123B	

Pin No.	Signal Name	Location	
51	NC	123D	
52	RESET-N	129E	
53	NC	123D	
54	NC	123D	
55	A07-P	129B	
56	A05-P	129B	
57	A03-P	129C	
58	A01-P	129C	
59	A21-P	129A	
60	A19-P	129A	
61	DCAS0-N	129E	
62	RD-N	129D	
63	A16-P	129B	
64	A14-P	129B	
65	0V	129F	
66	A12-P	129B	
67	A10-P	129B	
68	WR-N	129D	
69	DRAS3-N	129E	
70	DRAS5-N	129E	
71	D06-P	129D	
72	D04-P	129D	
73	D03-P	129D	
74	D01-P	129D	
75	5V	129F	
76	D15-P	129C	
77	D13-P	129C	
78	D10-P	129C	
79	D08-P	129C	
80	0V	123D	

Connector Name: 8F-OptFdr
Part Number: 221A1630P0081
Part Symbol: CN6

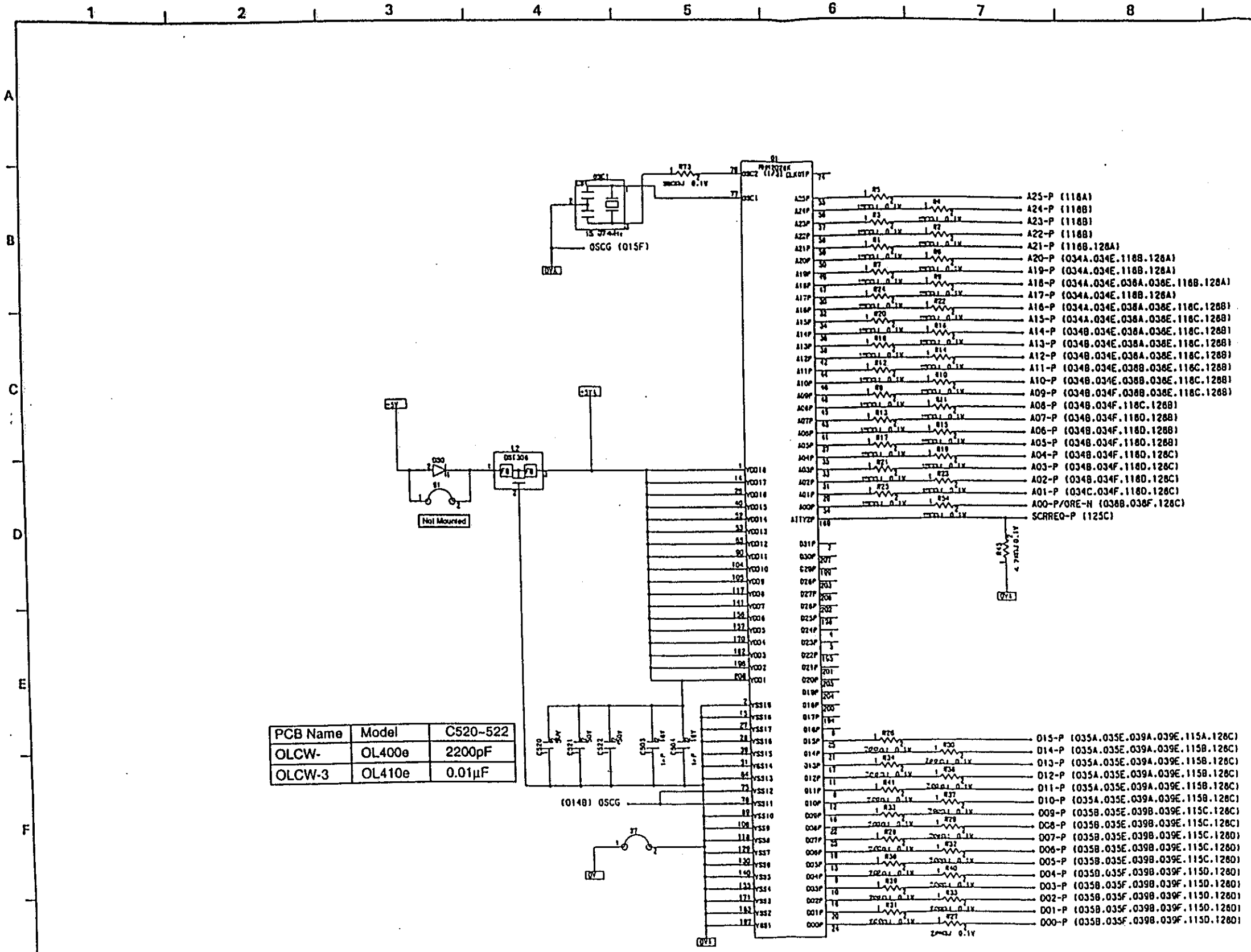
Pin No.	Signal Name	Location	
1	0PTPSIN-N	068F	
2	0PTSCLK-N	068E	
3	0PTSD-P	068D	
4	0PTSDR-N	069E	
5	0VP	068F	
6	30V	068E	
7	0V	068F	
8	5V	068F	
9	FG	068G	
10	FG	068G	
11	FG	068G	

Figure 5-31 Main Control PCB (OLCW-15/16) Circuit Diagram (Rev. 5)

Connector Name: 9M-RS232C
Part Number: 220A1376P0093
Part Symbol: CN9

Pin No.	Signal Name	Location	
1	CD	102D	
2	RXD	102C	
3	TXD	10XB	
4	DTR	10XC	
5	SG	10XD	
6	DSR	102C	
7	RTS	10XC	
8	CTS	102D	
9	SSD	10XC	
10	FG	10XD	
11	FG	10XD	

Figure 5-32 Main Control PCB (OLCW-16/16) Circuit Diagram (Rev. 5)



PCB Name	Model	C520~522
OLCW-	OL400e	2200pF
OLCW-3	OL410e	0.01µF

Figure 5-33 Main Control PCB (OLCW-1/15) Circuit Diagram (Rev. 6)

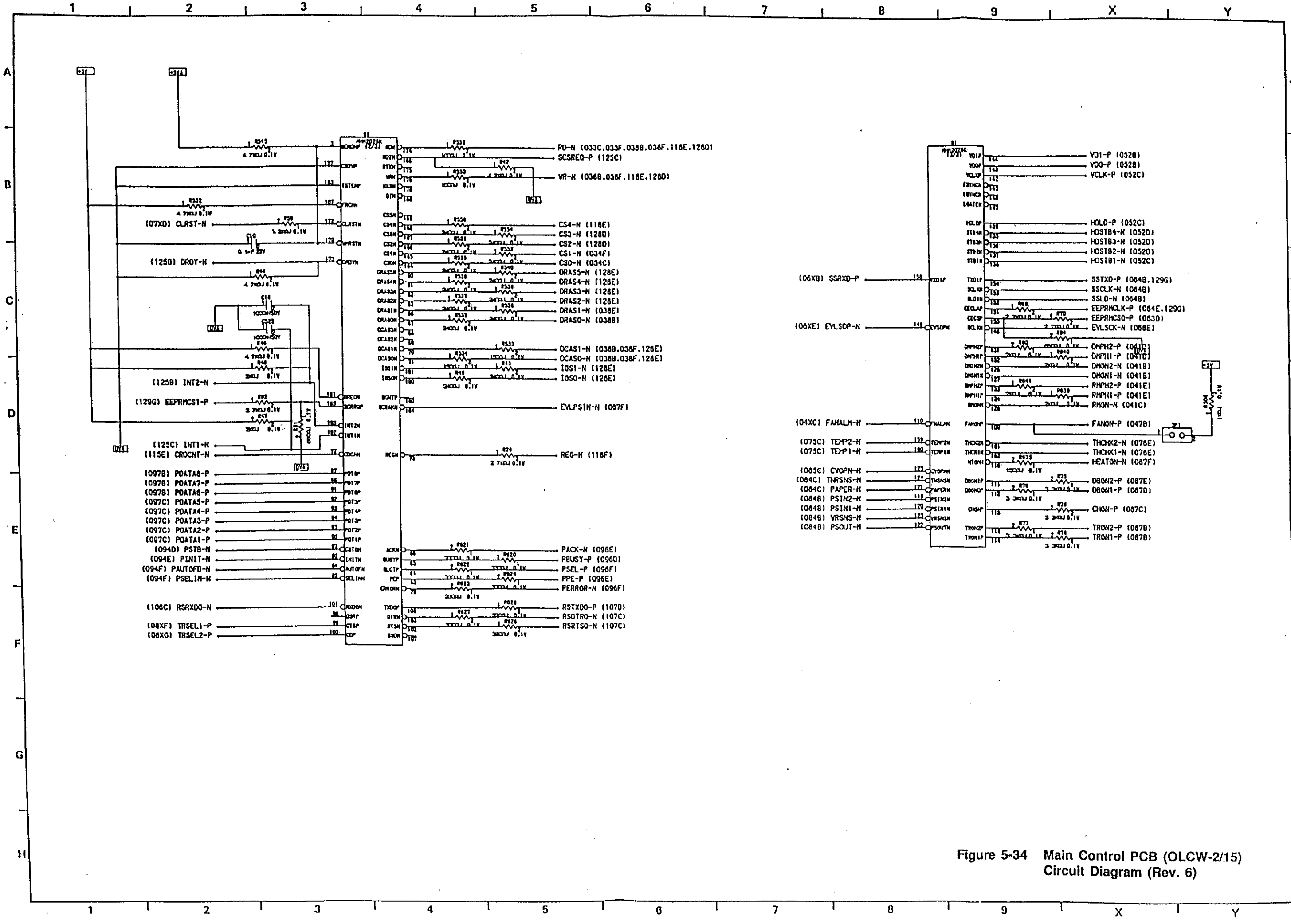


Figure 5-34 Main Control PCB (OLCW-2/15) Circuit Diagram (Rev. 6)

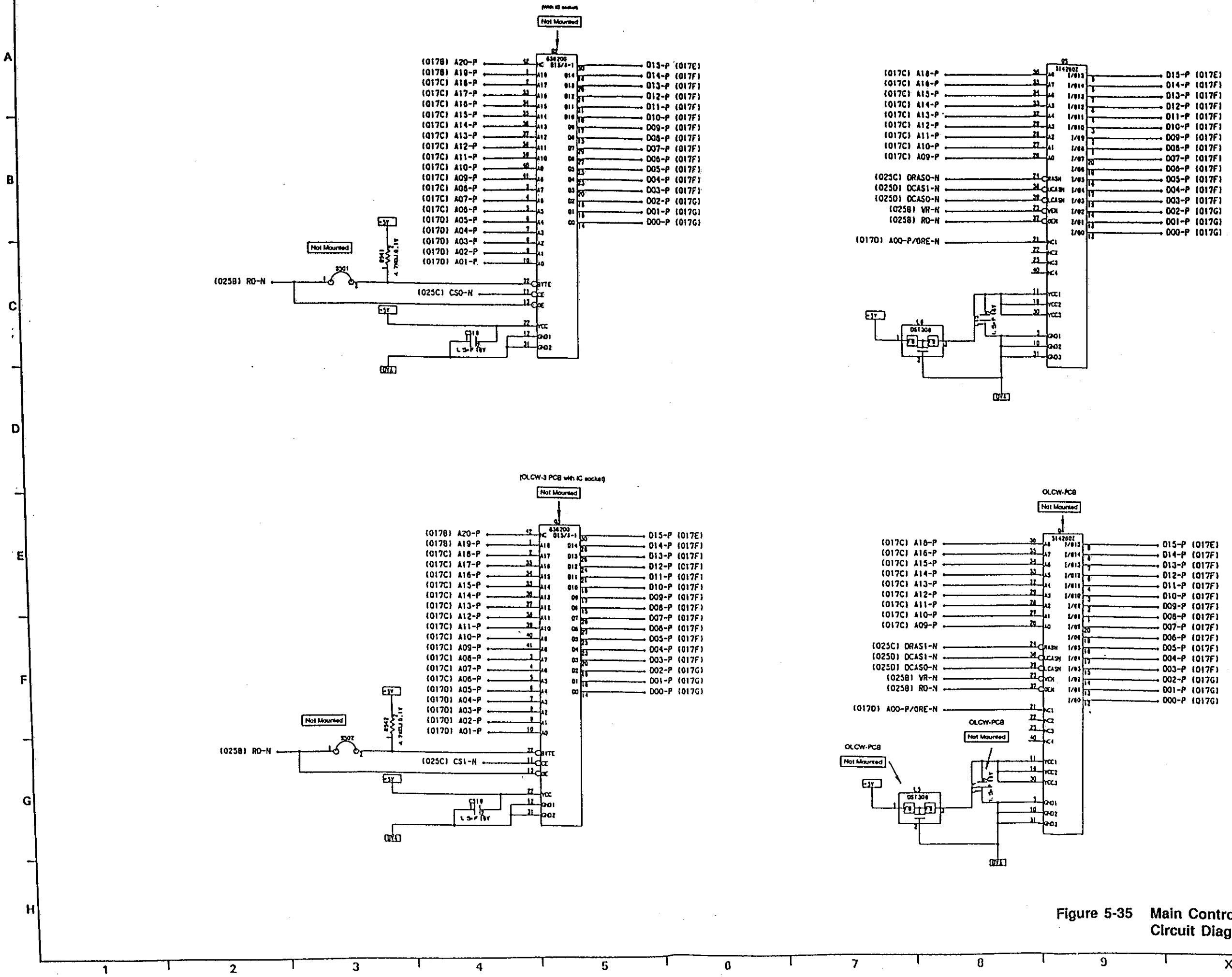


Figure 5-35 Main Control PCB (OLCW-3/15) Circuit Diagram (Rev. 6)

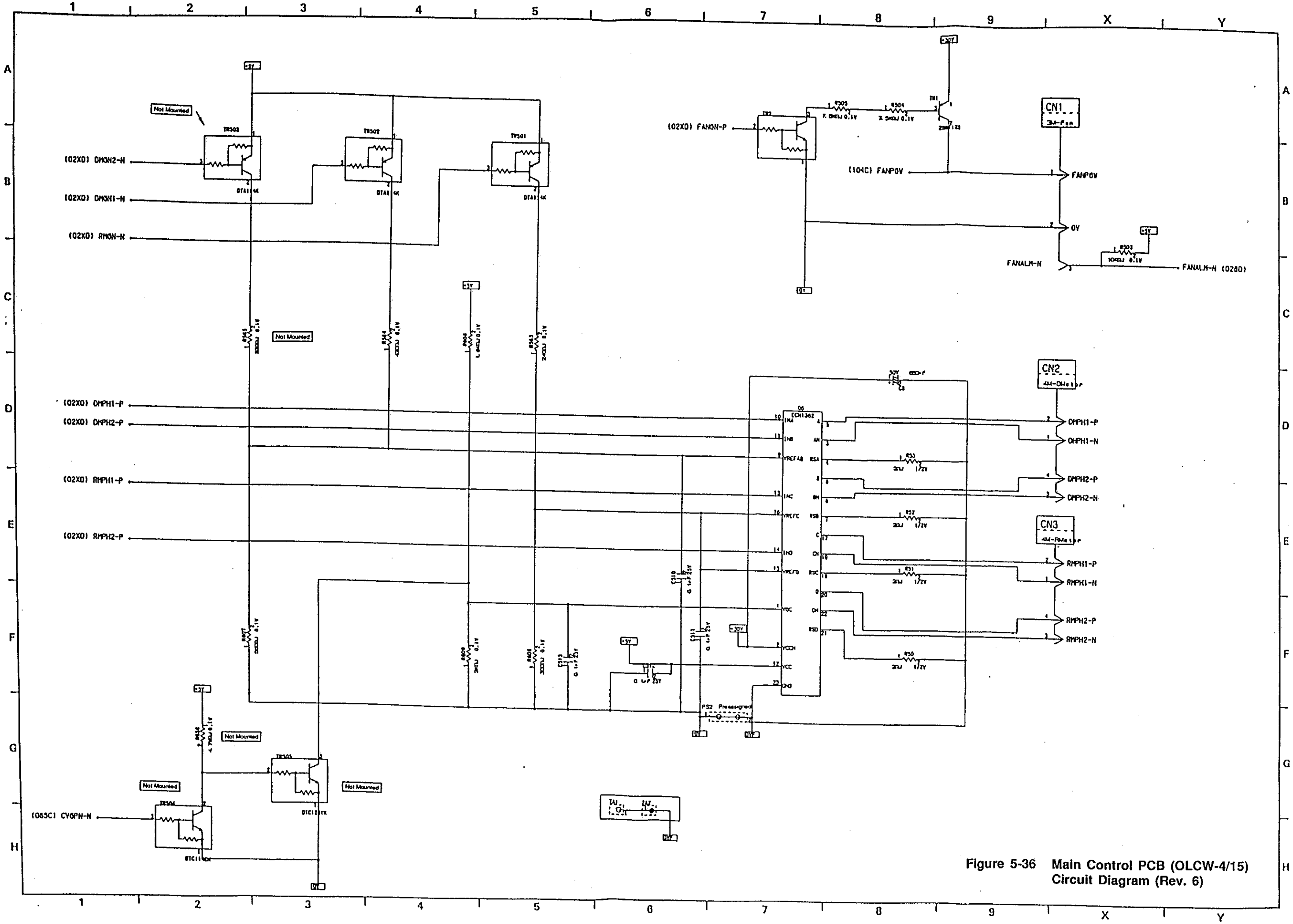


Figure 5-36 Main Control PCB (OLCW-4/15) Circuit Diagram (Rev. 6)

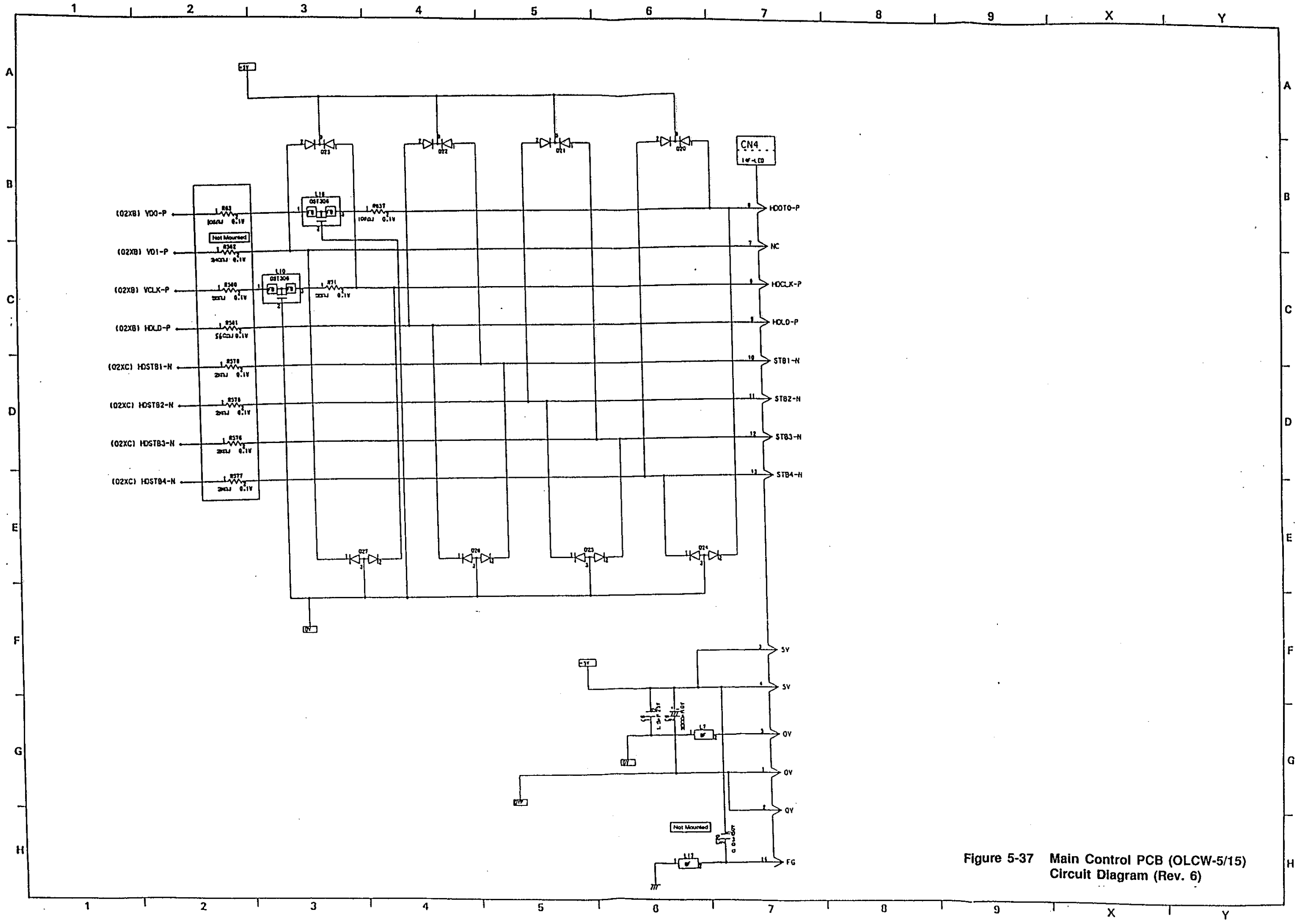


Figure 5-37 Main Control PCB (OLCW-5/15) Circuit Diagram (Rev. 6)

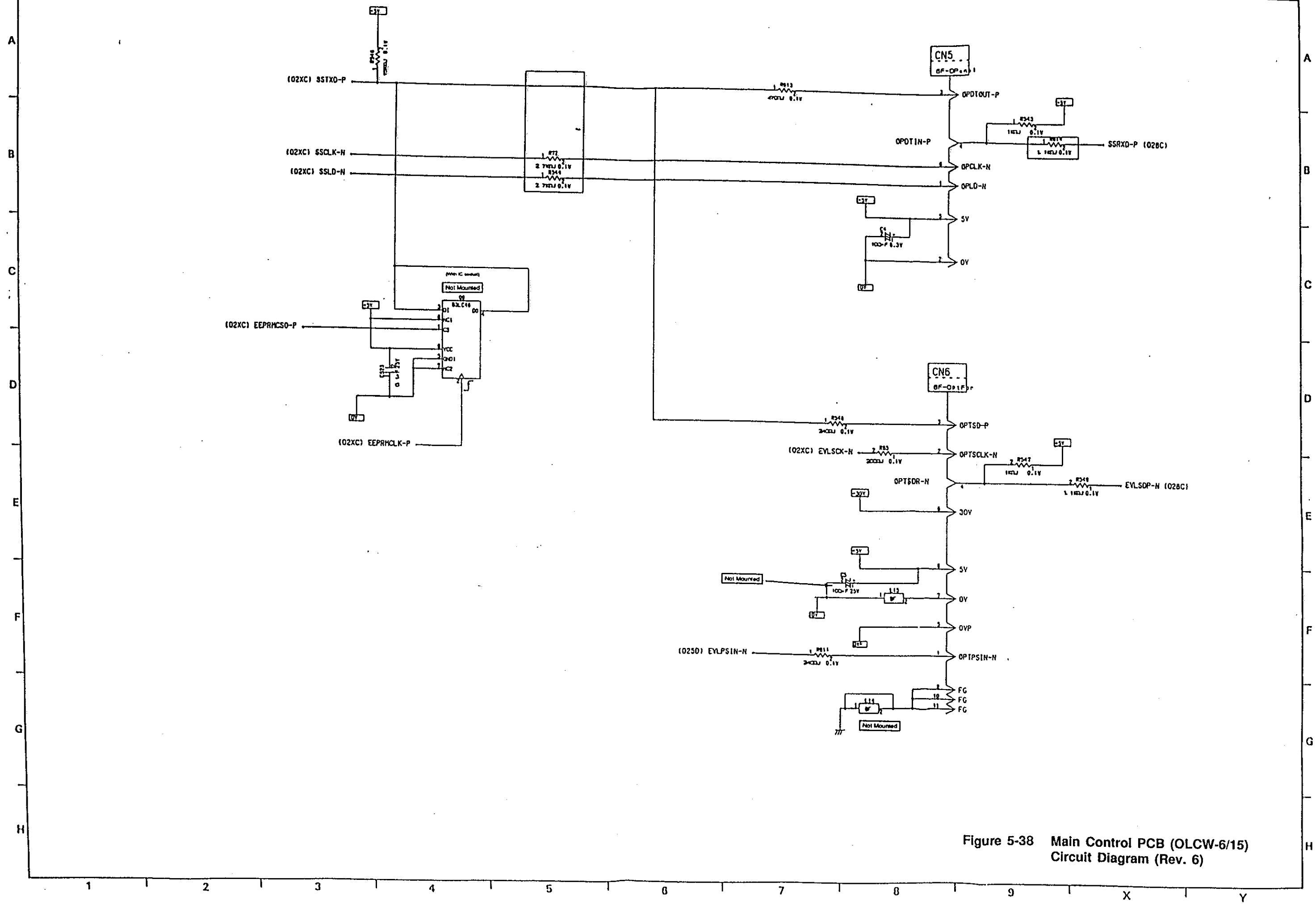


Figure 5-38 Main Control PCB (OLCW-6/15) Circuit Diagram (Rev. 6)

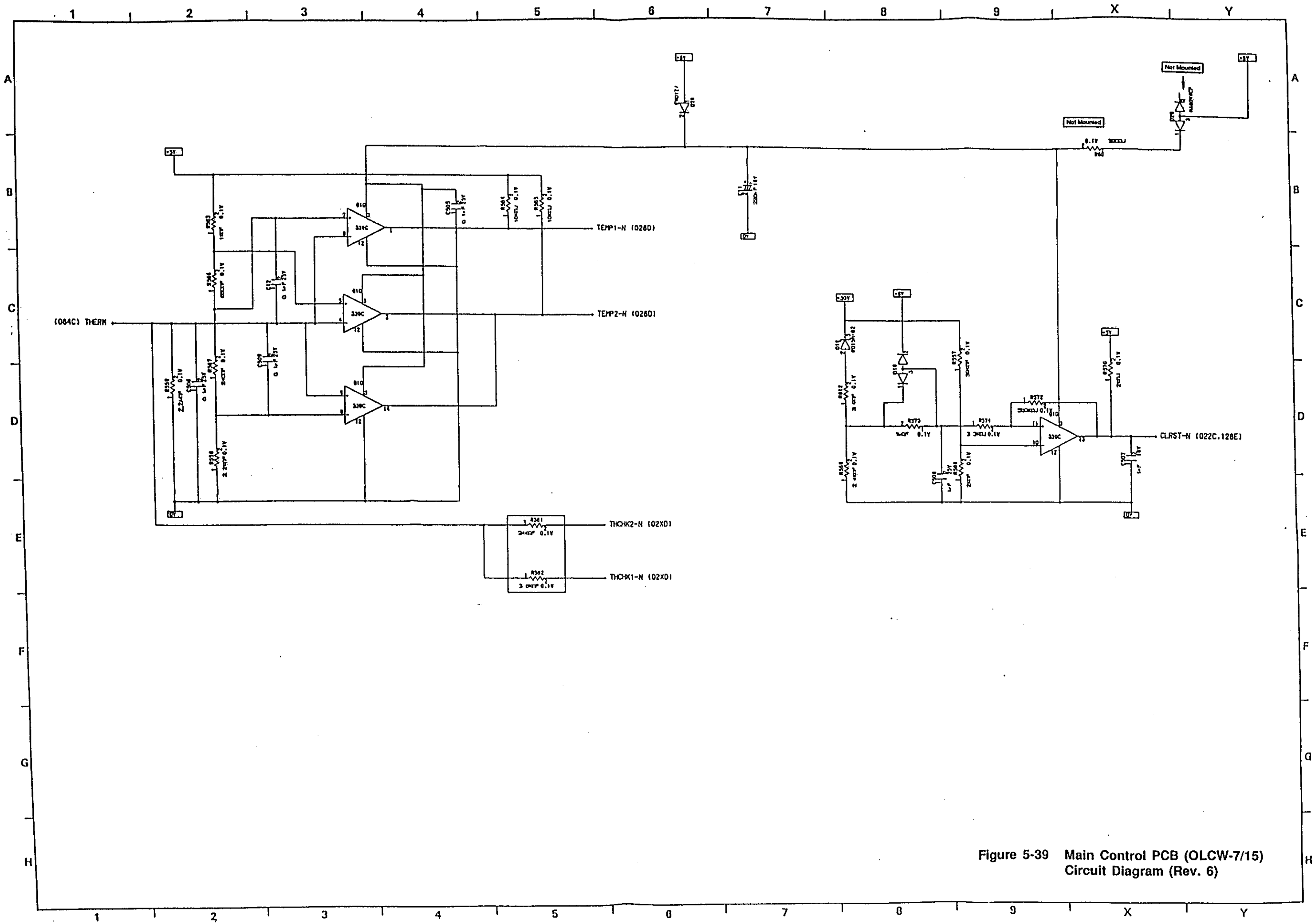


Figure 5-39 Main Control PCB (OLCW-7/15) Circuit Diagram (Rev. 6)

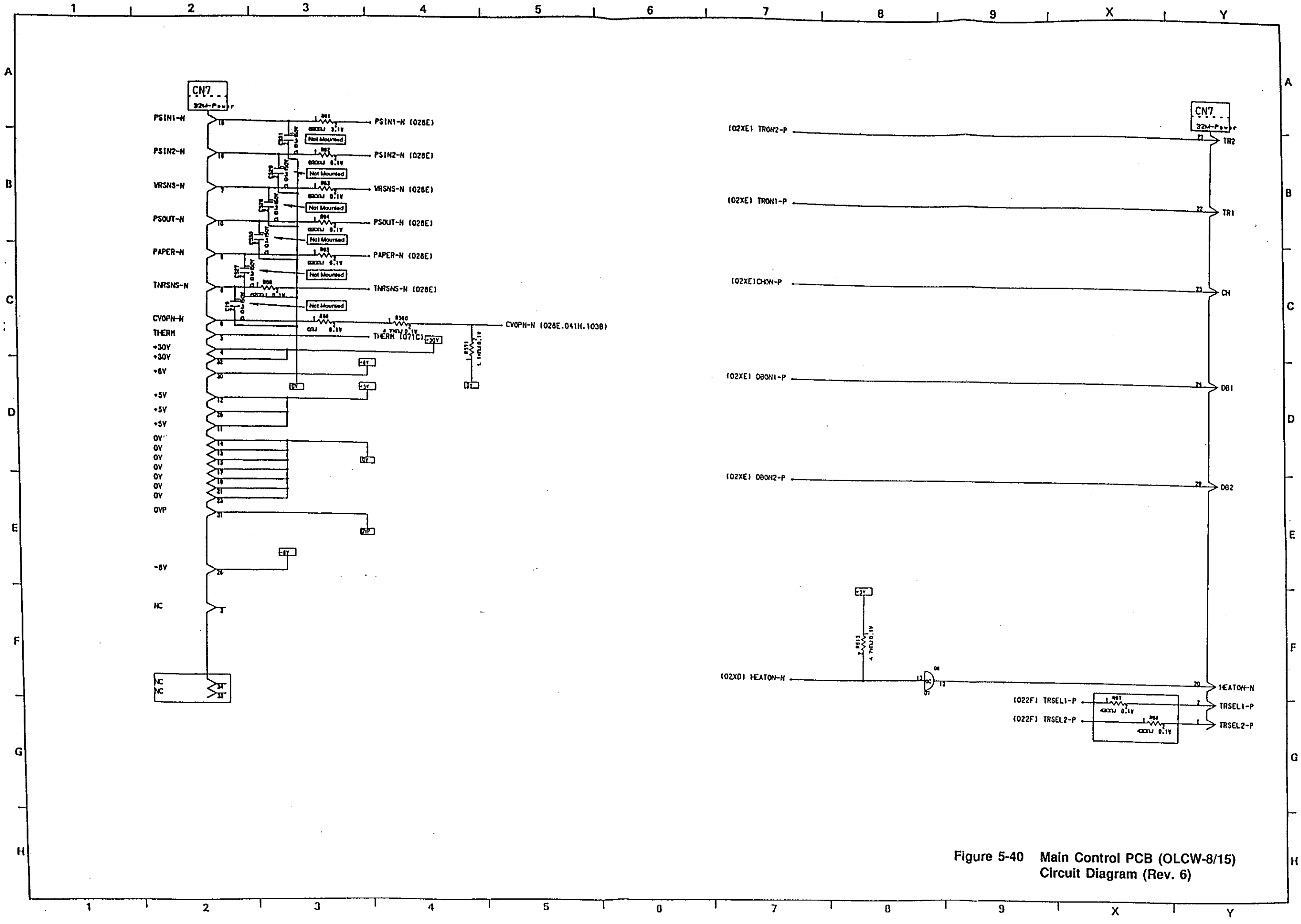
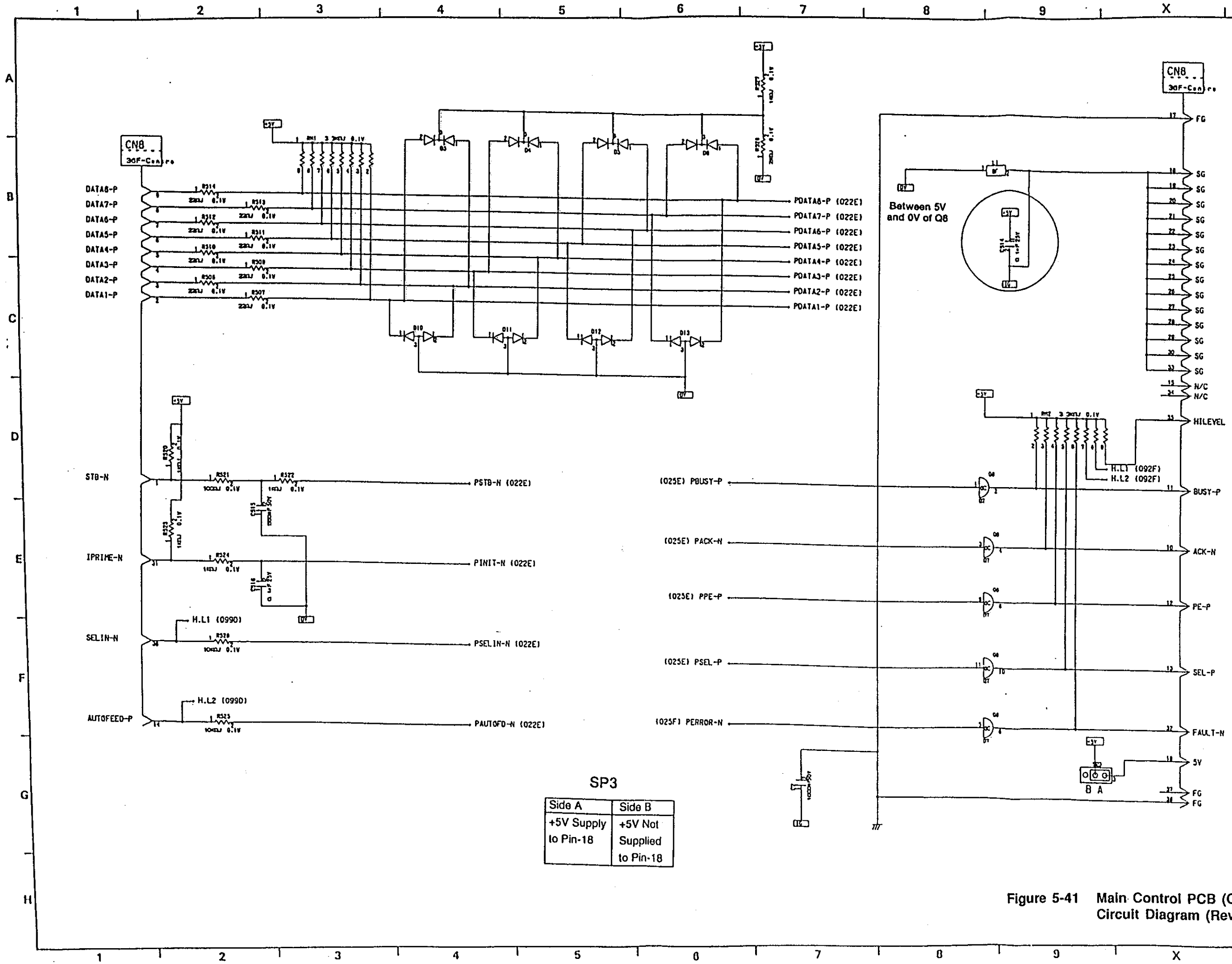


Figure 5-40 Main Control PCB (OLCW-8/15) Circuit Diagram (Rev. 6)



SP3

Side A	Side B
+5V Supply to Pin-18	+5V Not Supplied to Pin-18

Figure 5-41 Main Control PCB (OLCW-9/15) Circuit Diagram (Rev. 6)

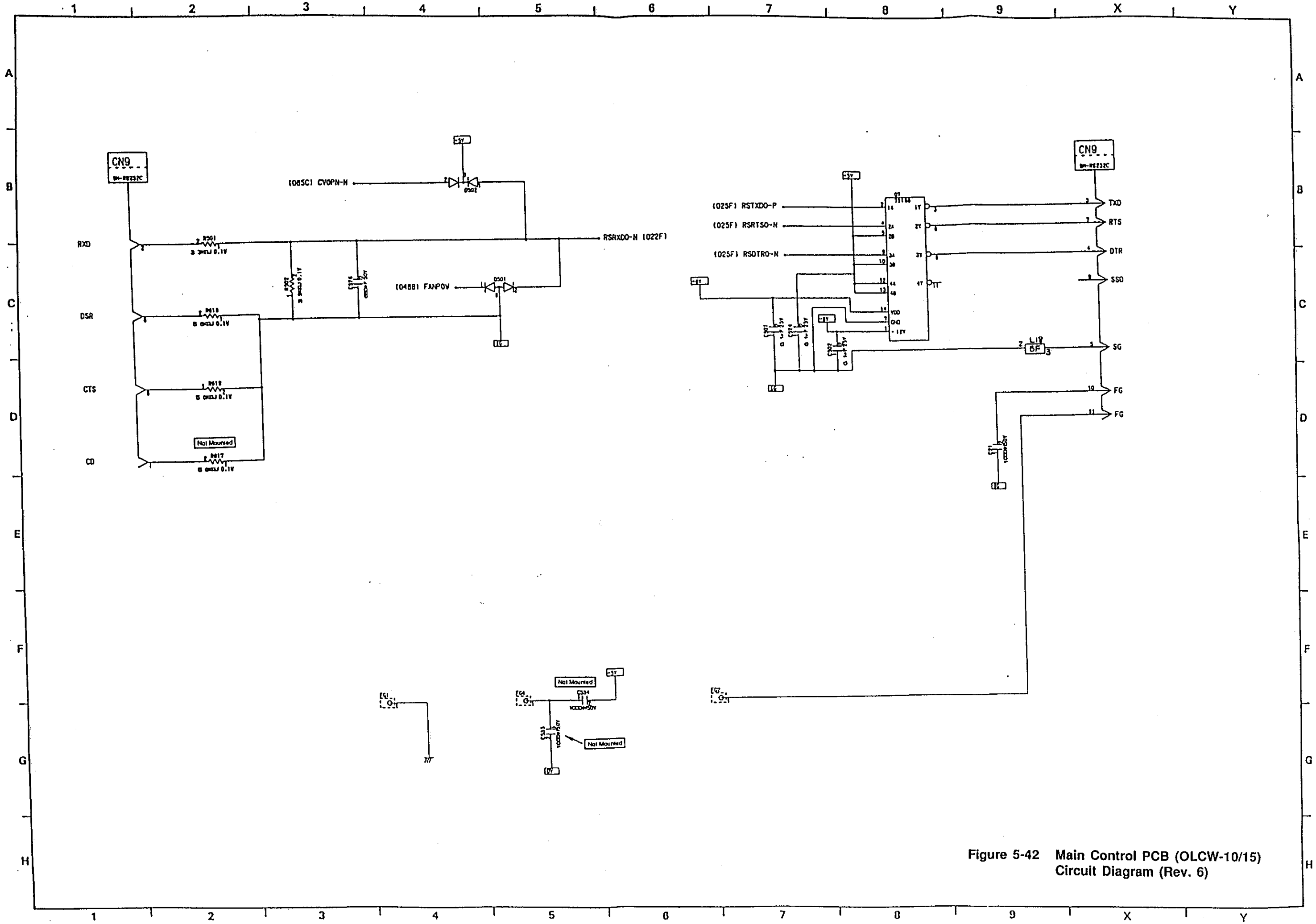


Figure 5-42 Main Control PCB (OLCW-10/15) Circuit Diagram (Rev. 6)

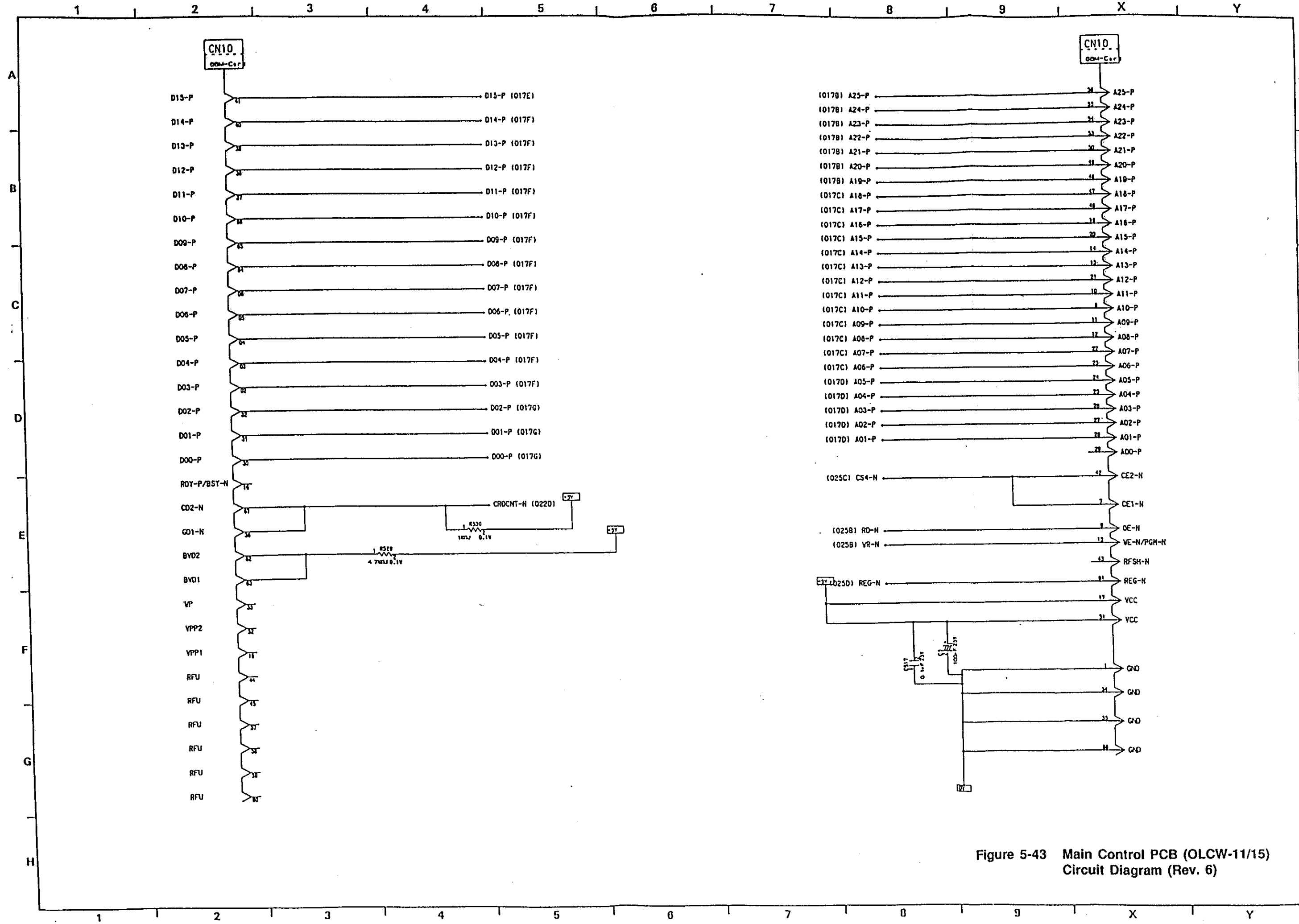


Figure 5-43 Main Control PCB (OLCW-11/15) Circuit Diagram (Rev. 6)

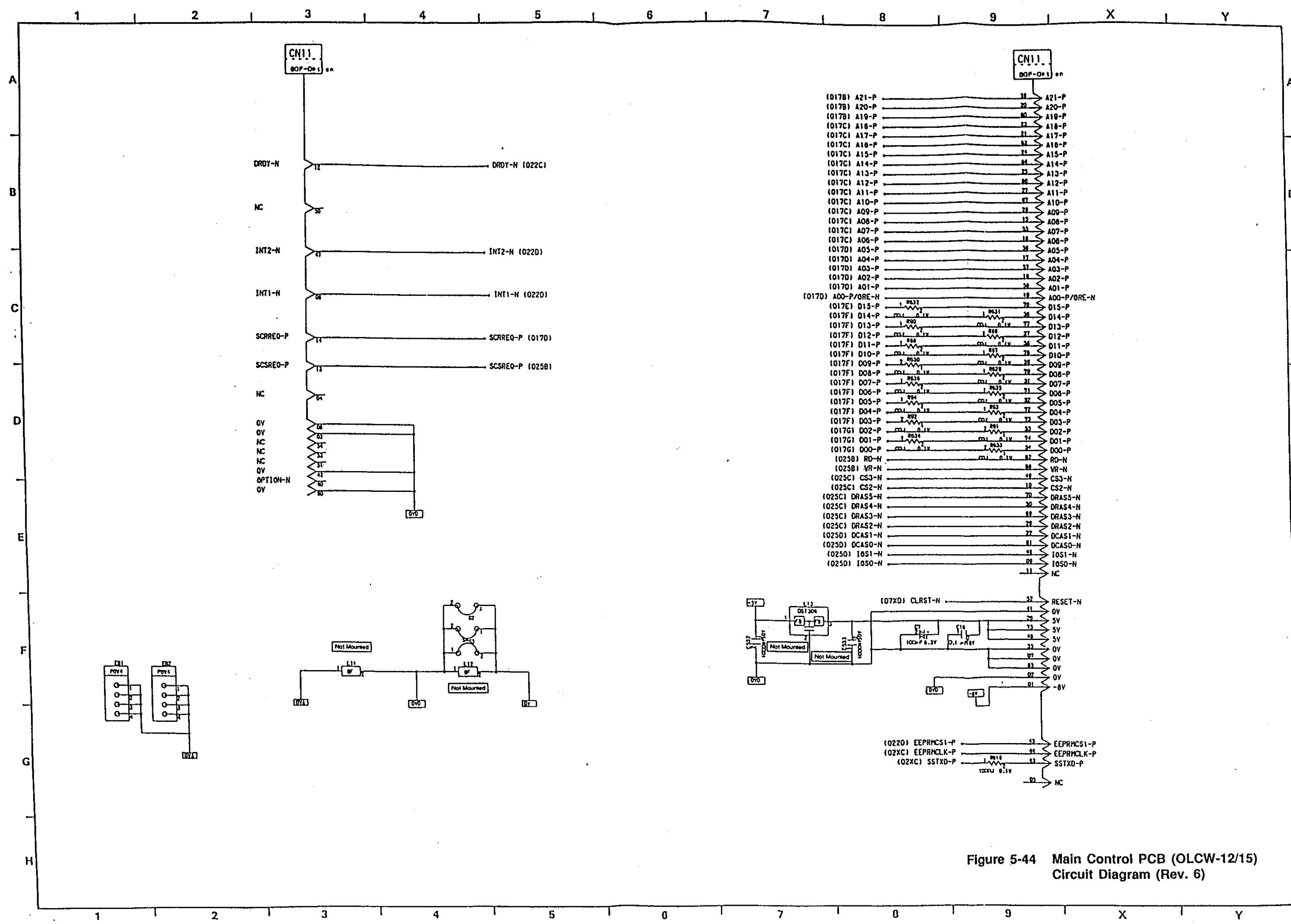


Figure 5-44 Main Control PCB (OLCW-12/15) Circuit Diagram (Rev. 6)

Connector Name: 14F-LED
Part Number: 224A3590P0140
Part Symbol: CN4

Pin No.	Signal Name	Location	
1	0V	057G	
2	0V	057G	
3	5V	057F	
4	5V	057F	
5	0V	057G	
6	HDDTO-P	057B	
7	NC	057B	
8	HDCLK-P	057C	
9	HDLD-P	057C	
10	STB1-N	057C	
11	STB2-N	057D	
12	STB3-N	057D	
13	STB4-N	057D	
14	FG	057H	

Connector Name: 32M-Power
Part Number: 224A3368P0320
Part Symbol: CN7

Pin No.	Signal Name	Location	
1	TRSEL2-P	08YG	
2	TRSEL1-P	08YF	
3	NC	082F	
4	+30V	082D	
5	THERM	082C	
6	CVOPN-N	082C	
7	WRSNS-N	082B	
8	TNRSNS-N	082C	
9	PAPER-N	082C	
10	PSOUT-N	082B	
11	+5V	082D	
12	+5V	082D	
13	0V	082D	
14	0V	082D	
15	0V	082D	
16	PSIN1-N	082B	
17	0V	082E	
18	PSIN2-N	082B	
19	0V	082E	
20	HEATON-N	08YF	
21	0V	082E	
22	TR1	08YB	
23	0V	082E	
24	DB1	08YD	
25	CH	08YC	
26	+5V	082D	
27	TR2	08YB	
28	-8V	082E	
29	DB2	08YE	
30	+8V	082D	
31	OVP	082E	
32	+30V	082D	
33	NC	082F	
34	NC	082F	

Connector Name: 36F-Centro
Part Number: 2204A1783P0360
Part Symbol: CN8

Pin No.	Signal Name	Location	
1	STB-N	092D	
2	DATA1-P	092C	
3	DATA2-P	092C	
4	DATA3-P	092C	
5	DATA4-P	092C	
6	DATA5-P	092C	
7	DATA6-P	092B	
8	DATA7-P	092B	
9	DATA8-P	092B	
10	ACK-N	09XE	
11	BUSY-P	09XD	
12	PE-P	09XE	
13	SEL-P	09XF	
14	AUTOFEED-P	092F	
15	N/C	09XD	
16	SG	09XB	
17	FG	09XA	
18	5V	09XG	
19	SG	09XB	
20	SG	09XB	
21	SG	09XB	
22	SG	09XB	
23	SG	09XC	
24	SG	09XC	
25	SG	09XC	
26	SG	09XC	
27	SG	09XC	
28	SG	09XC	
29	SG	09XC	
30	SG	09XC	
31	IPRIME-N	092E	
32	FAULT-N	09XF	
33	SG	09XC	
34	N/C	09XD	
35	HILEVEL	09XD	
36	SELIN-N	092F	
37	FG	09XG	
38	FG	09XG	

Connector Name: 3M-Fan
Part Number: 224A3528P0030
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	FANPOW	049B	
2	0V	049B	
3	FANALM-N	04XC	

Figure 5-45 Main Control PCB (OLCW-13/15) Circuit Diagram (Rev. 6)

Connector Name: 4M-DMotor
Part Number: 224A3357P0040
Part Symbol: CN2

Pin No.	Signal Name	Location	
1	DMPH1-N	049D	
2	DMPH1-P	049D	
3	DMPH2-N	049E	
4	DMPH2-P	049D	

Connector Name: 4M-RMotor
Part Number: 224A3357P0040
Part Symbol: CN3

Pin No.	Signal Name	Location	
1	RMPH1-N	049E	
2	RMPH1-P	049E	
3	RMPH2-N	049F	
4	RMPH2-P	049F	

Connector Name: 68M-Card
Part Number: 224A0121P0680
Part Symbol: CN10

Pin No.	Signal Name	Location	
1	GND	11XF	
02	D03-P	113D	
03	D04-P	113D	
04	D05-P	113C	
05	D06-P	113C	
06	D07-P	113C	
7	CE1-N	11XE	
8	A10-P	11XC	
9	OE-N	11XE	
10	A11-P	11XC	
11	A09-P	11XC	
12	A08-P	11XC	
13	A13-P	11XC	
14	A14-P	11XC	
15	WE-N/PGM-N	11XE	
16	RDY-P/BSY-N	113E	
17	VCC	11XF	
18	VPP1	113F	
19	A16-P	11XC	
20	A15-P	11XC	
21	A12-P	11XC	
22	A07-P	11XD	
23	A06-P	11XD	
24	A05-P	11XD	
25	A04-P	11XD	
26	A03-P	11XD	
27	A02-P	11XD	
28	A01-P	11XD	
29	A00-P	11XD	
30	D00-P	113D	
31	D01-P	113D	
32	D02-P	113D	
33	VP	113F	
34	GND	11XF	
35	GND	11XG	
36	GD1-N	113E	
37	D11-P	113B	
38	D12-P	113B	
39	D13-P	113B	
40	D14-P	113B	
41	D15-P	113A	
42	CE2-N	11XE	
43	RFSH-N	11XE	
44	RFU	113F	
45	RFU	113F	
46	A17-P	11XB	
47	A18-P	11XB	
48	A19-P	11XB	
49	A20-P	11XB	
50	A21-P	11XB	

Pin No.	Signal Name	Location	
51	VCC	11XF	
52	VPP2	113F	
53	A22-P	11XB	
54	A23-P	11XB	
55	A24-P	11XB	
56	A25-P	11XA	
57	RFU	113G	
58	RFU	113G	
59	RFU	113G	
60	RFU	113G	
61	REG-N	11XF	
62	BVD2	113E	
63	BVD1	113E	
64	D08-P	113C	
65	D09-P	113C	
66	D10-P	113B	
67	CD2-N	113E	
68	GND	11XG	

Figure 5-46 Main Control PCB (OLCW-14/15) Circuit Diagram (Rev. 6)

Connector Name: 6F-OPanel
Part Number: 224A3590P0060
Part Symbol: CN5

Pin No.	Signal Name	Location	
1	OPLD-N	068B	
2	0V	068C	
3	OPDTOUT-P	068B	
4	OPDTIN-P	069B	
5	5V	068C	
6	OPCLK-N	068B	

Connector Name: 80F-Option
Part Number: 224A3516P0800
Part Symbol: CN11

Pin No.	Signal Name	Location	
01	-8V	129F	
02	0V	129F	
03	0V	123D	
04	NC	123D	
05	NC	129G	
06	0V	123D	
07	0V	129F	
08	INT1-N	123C	
09	IOSO-N	129E	
10	CS2-N	129D	
11	NC	129E	
12	DRDY-N	123B	
13	SCSREQ-P	123C	
14	SCRREQ-P	123C	
15	A08-P	129B	
16	A06-P	129B	
17	A04-P	129C	
18	A02-P	129C	
19	A00-P/ORE-N	129C	
20	A20-P	129A	
21	A17-P	129A	
22	DCAS1-N	129E	
23	A18-P	129A	
24	A15-P	129B	
25	A13-P	129B	
26	5V	129F	
27	A11-P	129B	
28	A09-P	129B	
29	DRAS2-N	129E	
30	DRAS4-N	129E	
31	D07-P	129D	
32	D05-P	129D	
33	D02-P	129D	
34	D00-P	129D	
35	0V	129F	
36	D14-P	129C	
37	D12-P	129C	
38	D11-P	129C	
39	D09-P	129C	
40	OPTION-N	123D	
41	0V	129E	
42	0V	123D	
43	SSTXD-P	129G	
44	EEPRMCLK-P	129G	
45	EEPRMCS1-P	129G	
46	5V	129F	
47	INT2-N	123B	
48	IOS1-N	129E	
49	CS3-N	129D	
50	NC	123B	

Pin No.	Signal Name	Location	
51	NC	123D	
52	RESET-N	129E	
53	NC	123D	
54	NC	123D	
55	A07-P	129B	
56	A05-P	129B	
57	A03-P	129C	
58	A01-P	129C	
59	A21-P	129A	
60	A19-P	129A	
61	DCAS0-N	129E	
62	RD-N	129D	
63	A16-P	129B	
64	A14-P	129B	
65	0V	129F	
66	A12-P	129B	
67	A10-P	129B	
68	WR-N	129D	
69	DRAS3-N	129E	
70	DRAS5-N	129E	
71	D06-P	129D	
72	D04-P	129D	
73	D03-P	129D	
74	D01-P	129D	
75	5V	129F	
76	D15-P	129C	
77	D13-P	129C	
78	D10-P	129C	
79	D08-P	129C	
80	0V	123D	

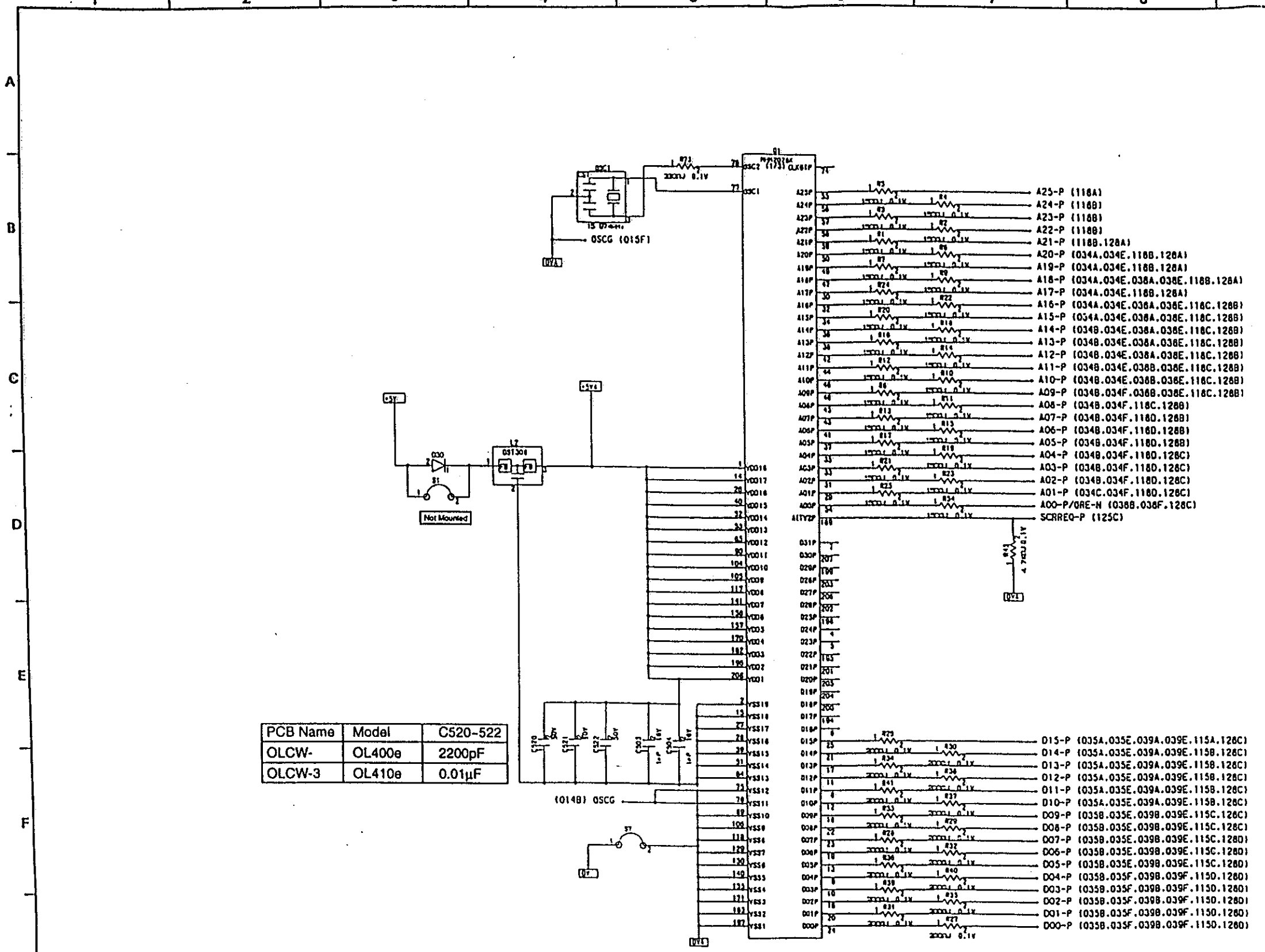
Connector Name: 8F-OptFdr
Part Number: 221A1630P0801
Part Symbol: CN6

Pin No.	Signal Name	Location	
1	OPTPSIN-N	068F	
2	OPTSCLK-N	068E	
3	OPTSD-P	068D	
4	OPTSDR-N	069E	
5	OVP	068F	
6	30V	068E	
7	0V	068F	
8	5V	068F	
9	FG	068G	
10	FG	068G	
11	FG	068G	

Connector Name: 9M-RS232C
Part Number: 220A1376P0093
Part Symbol: CN9

Pin No.	Signal Name	Location	
1	CD	102D	
2	RXD	102C	
3	TXD	10XB	
4	DTR	10XC	
5	SG	10XD	
6	DSR	102C	
7	RTS	10XC	
8	CTS	102D	
9	SSD	10XC	
10	FG	10XD	
11	FG	10XD	

Figure 5-47 Main Control PCB (OLCW-15/15) Circuit Diagram (Rev. 6)



PCB Name	Model	C520-522
OLCW-	OL400e	2200pF
OLCW-3	OL410e	0.01µF

Figure 5-48 Main Control PCB (OLCW-1/15) Circuit Diagram (Rev. 7)

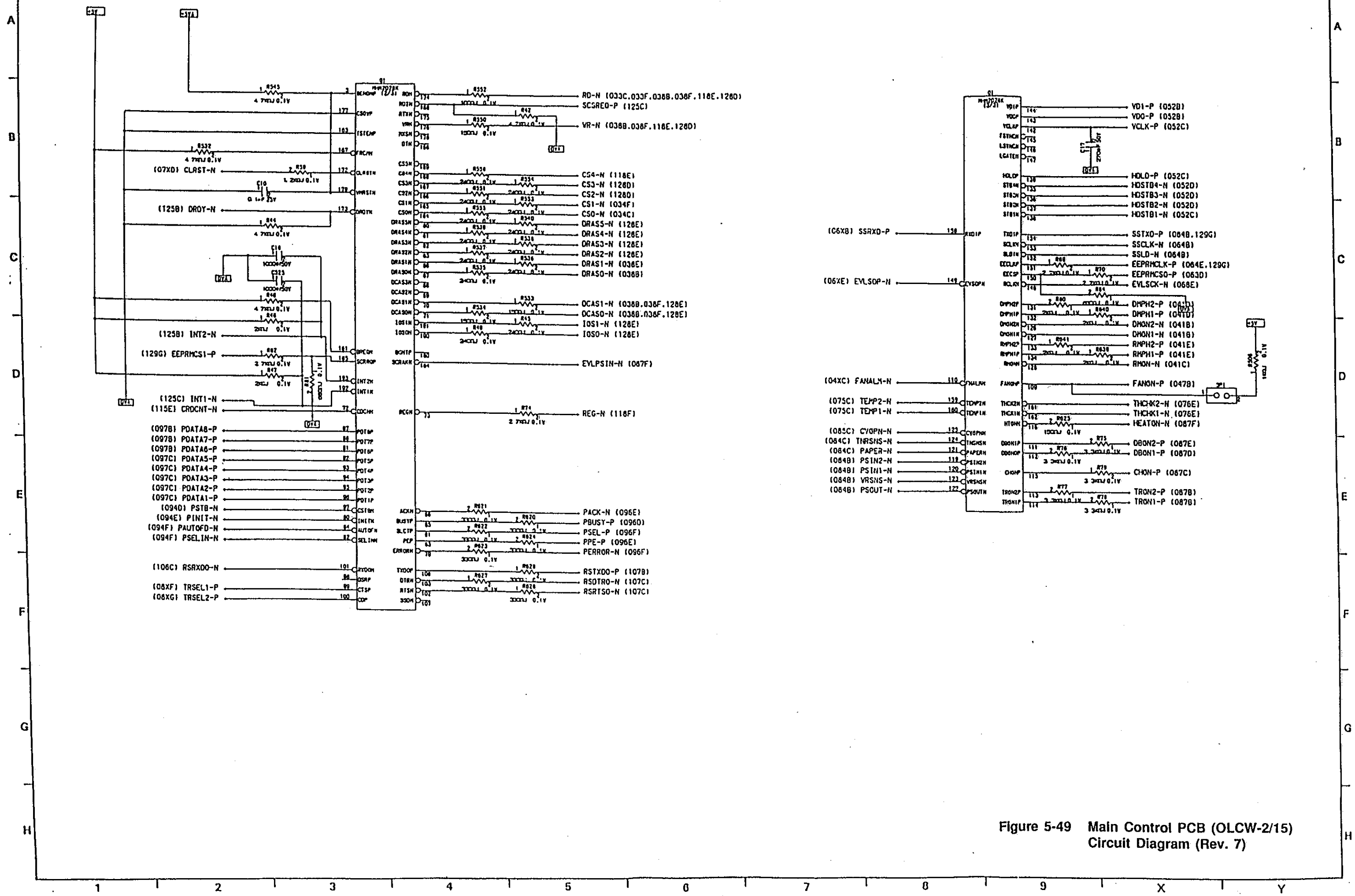


Figure 5-49 Main Control PCB (OLCW-2/15) Circuit Diagram (Rev. 7)

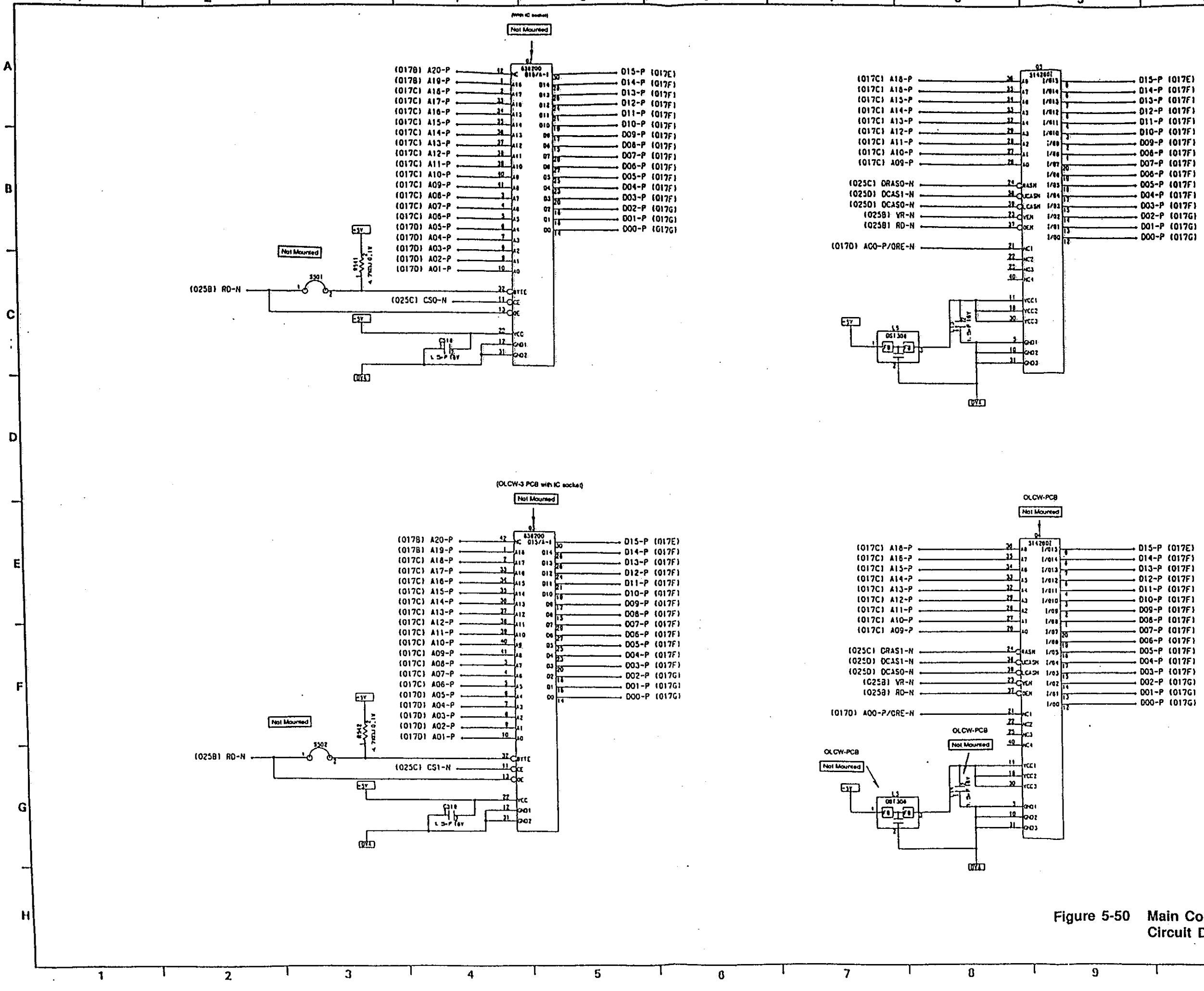


Figure 5-50 Main Control PCB (OLCW-3/15) Circuit Diagram (Rev. 7)

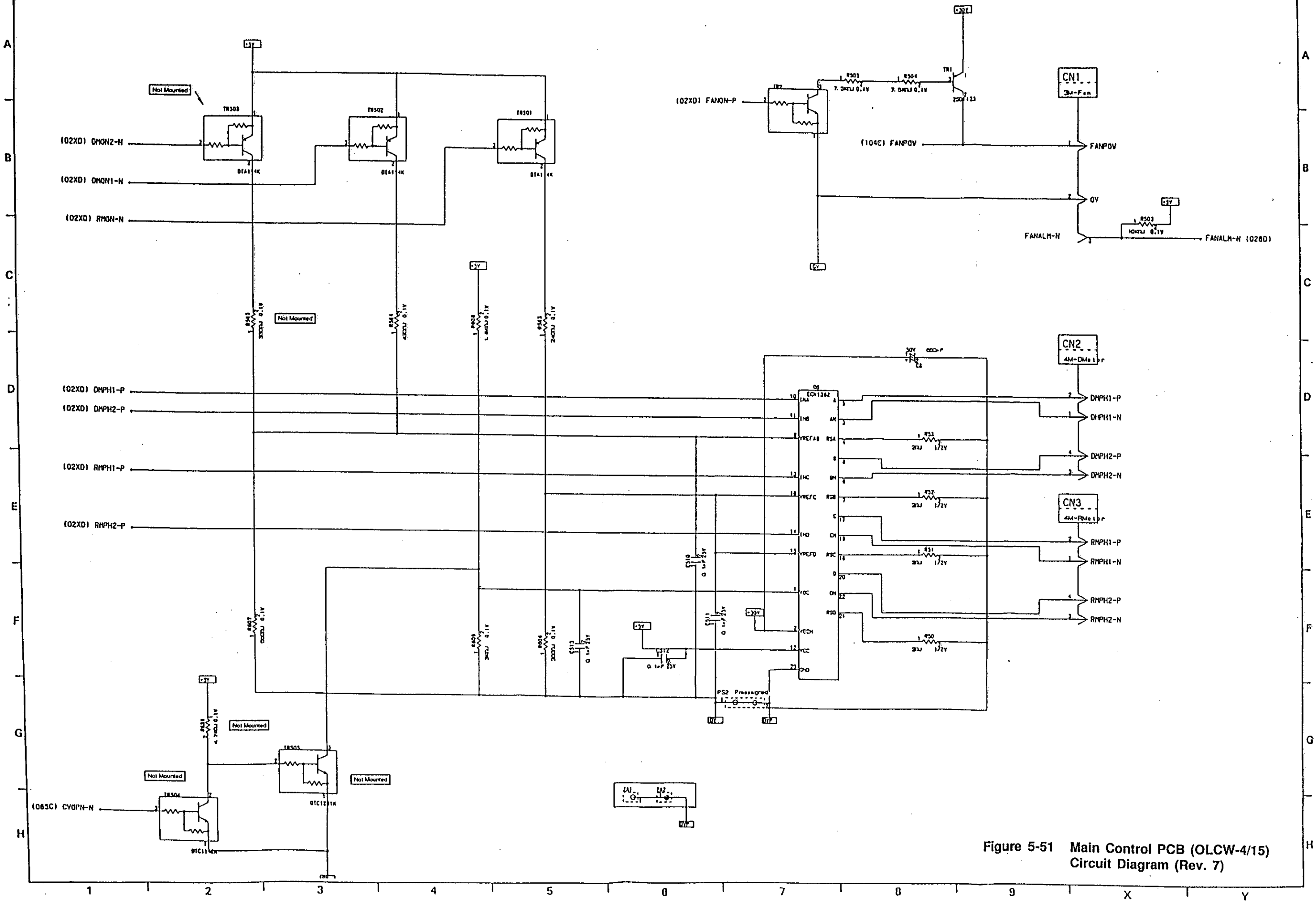


Figure 5-51 Main Control PCB (OLCW-4/15) Circuit Diagram (Rev. 7)

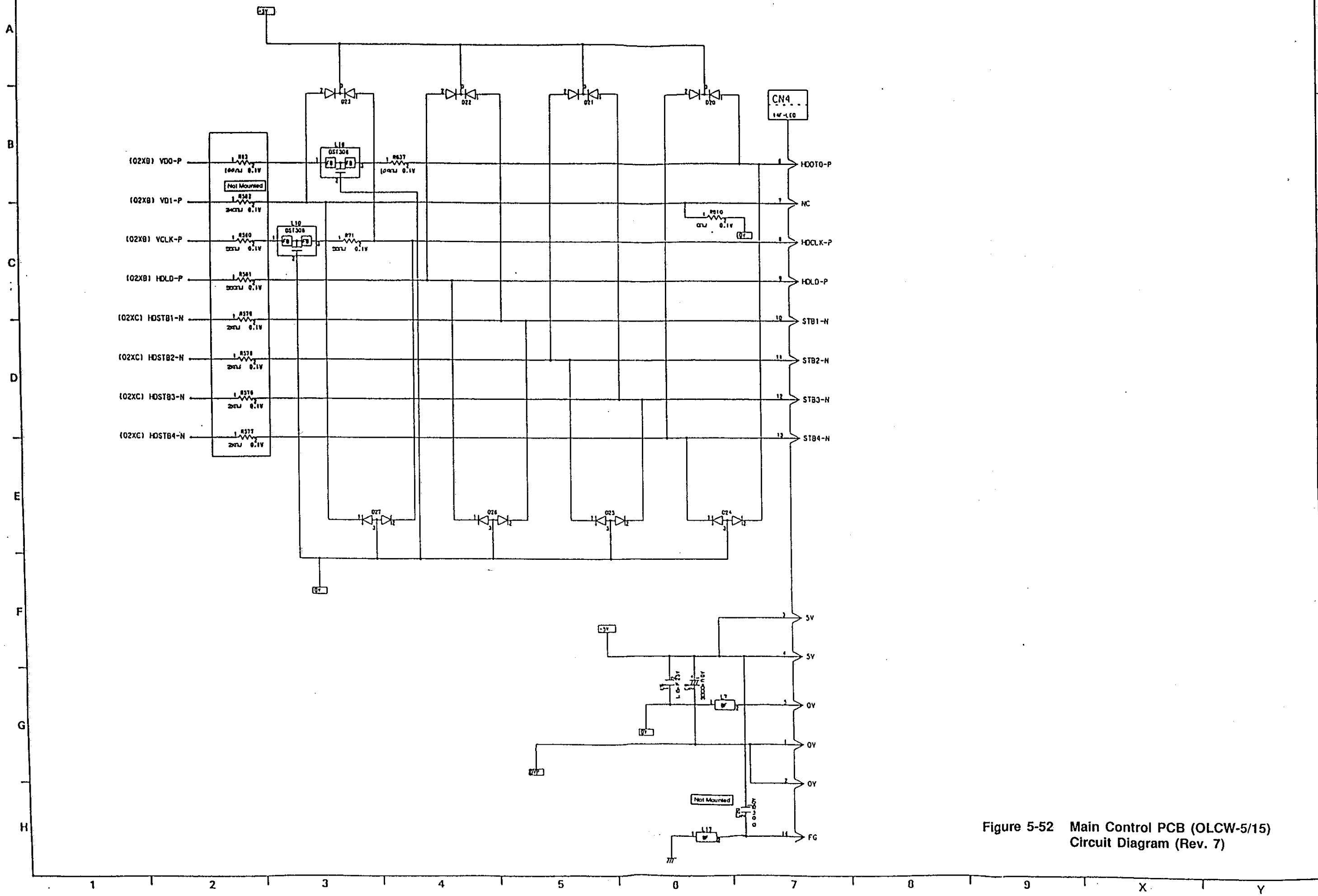


Figure 5-52 Main Control PCB (OLCW-5/15) Circuit Diagram (Rev. 7)

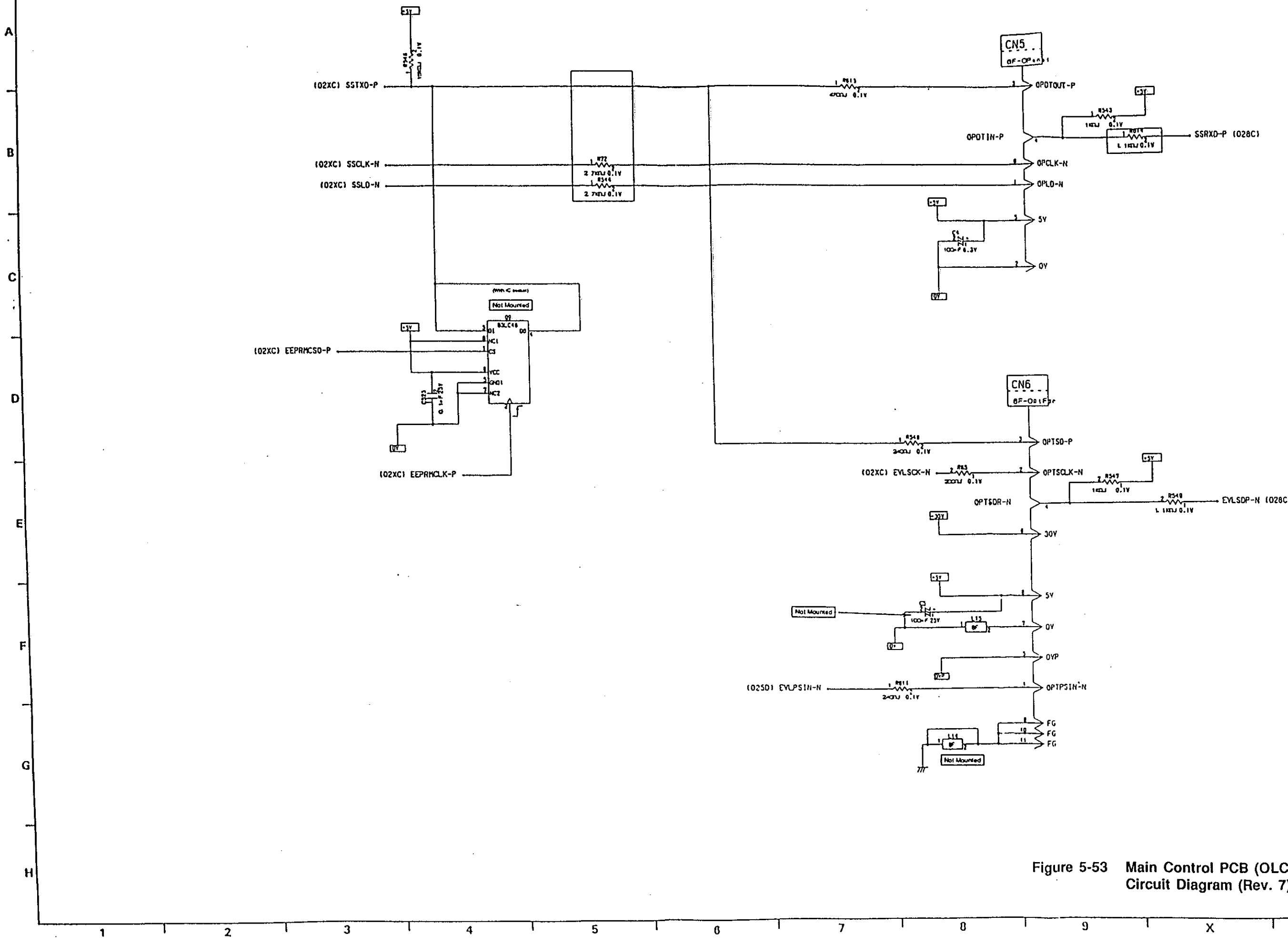


Figure 5-53 Main Control PCB (OLCW-6/15) Circuit Diagram (Rev. 7)

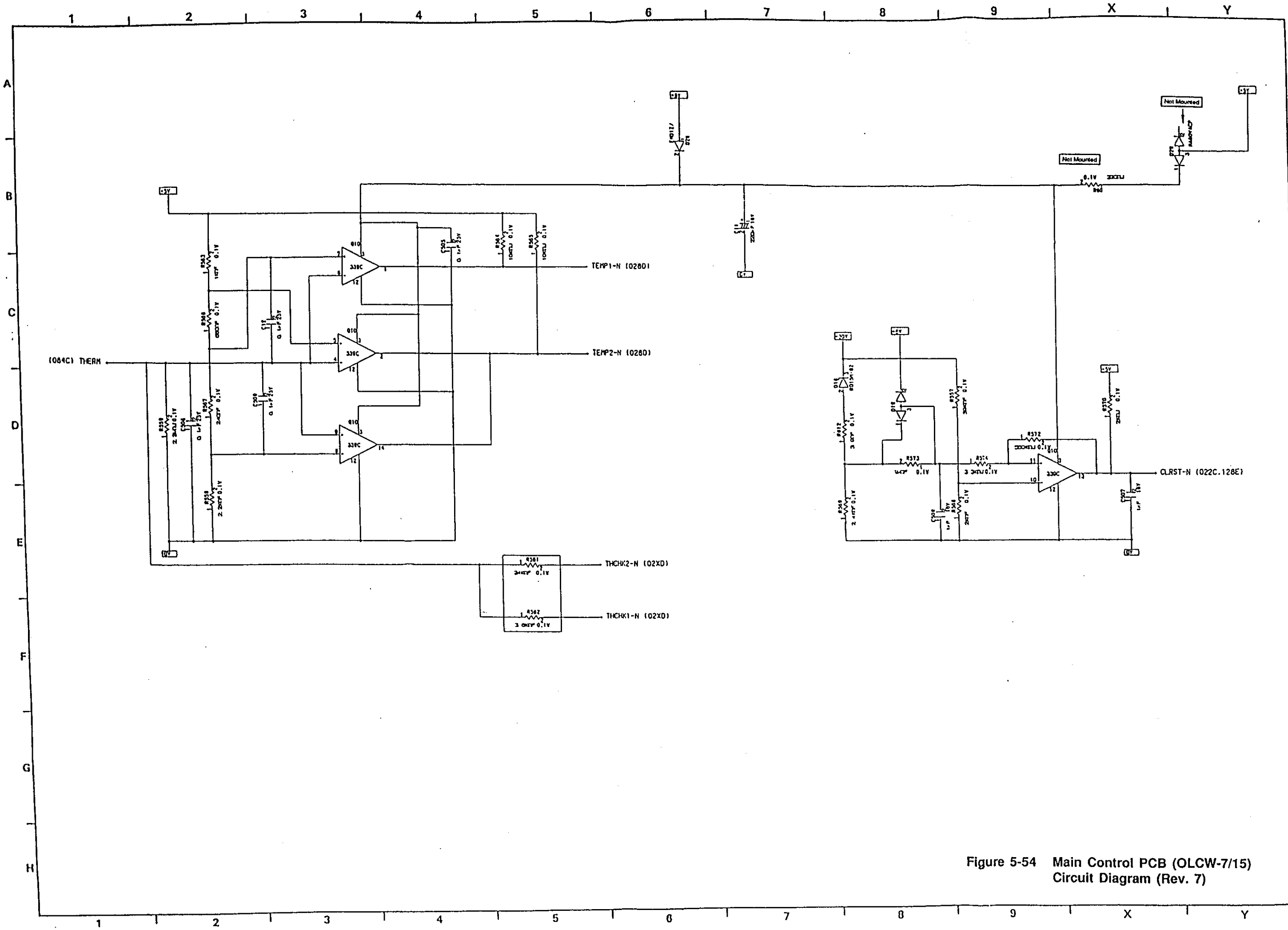


Figure 5-54 Main Control PCB (OLCW-7/15) Circuit Diagram (Rev. 7)

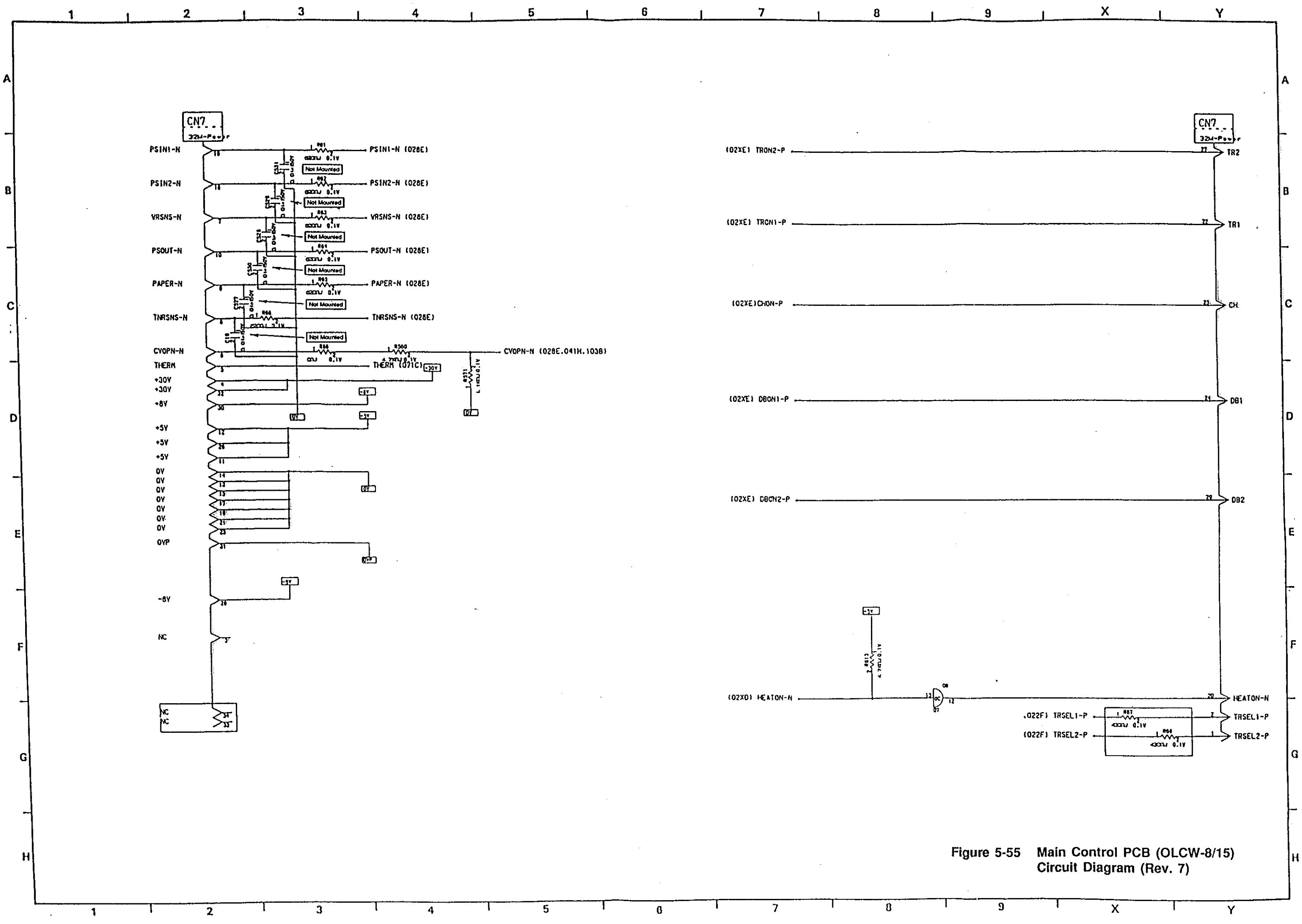
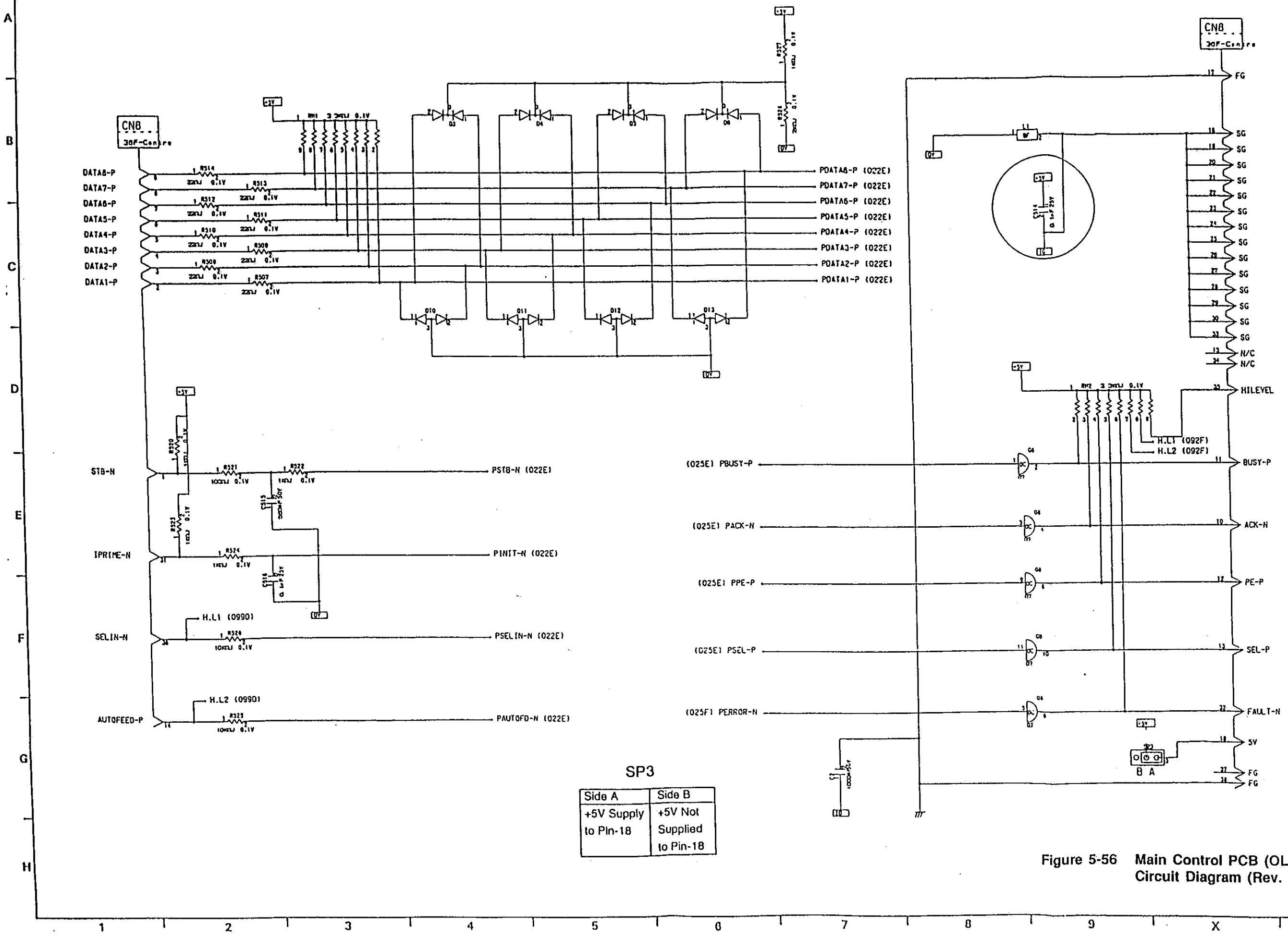


Figure 5-55 Main Control PCB (OLCW-8/15) Circuit Diagram (Rev. 7)



SP3

Side A	Side B
+5V Supply to Pin-18	+5V Not Supplied to Pin-18

Figure 5-56 Main Control PCB (OLCW-9/15) Circuit Diagram (Rev. 7)

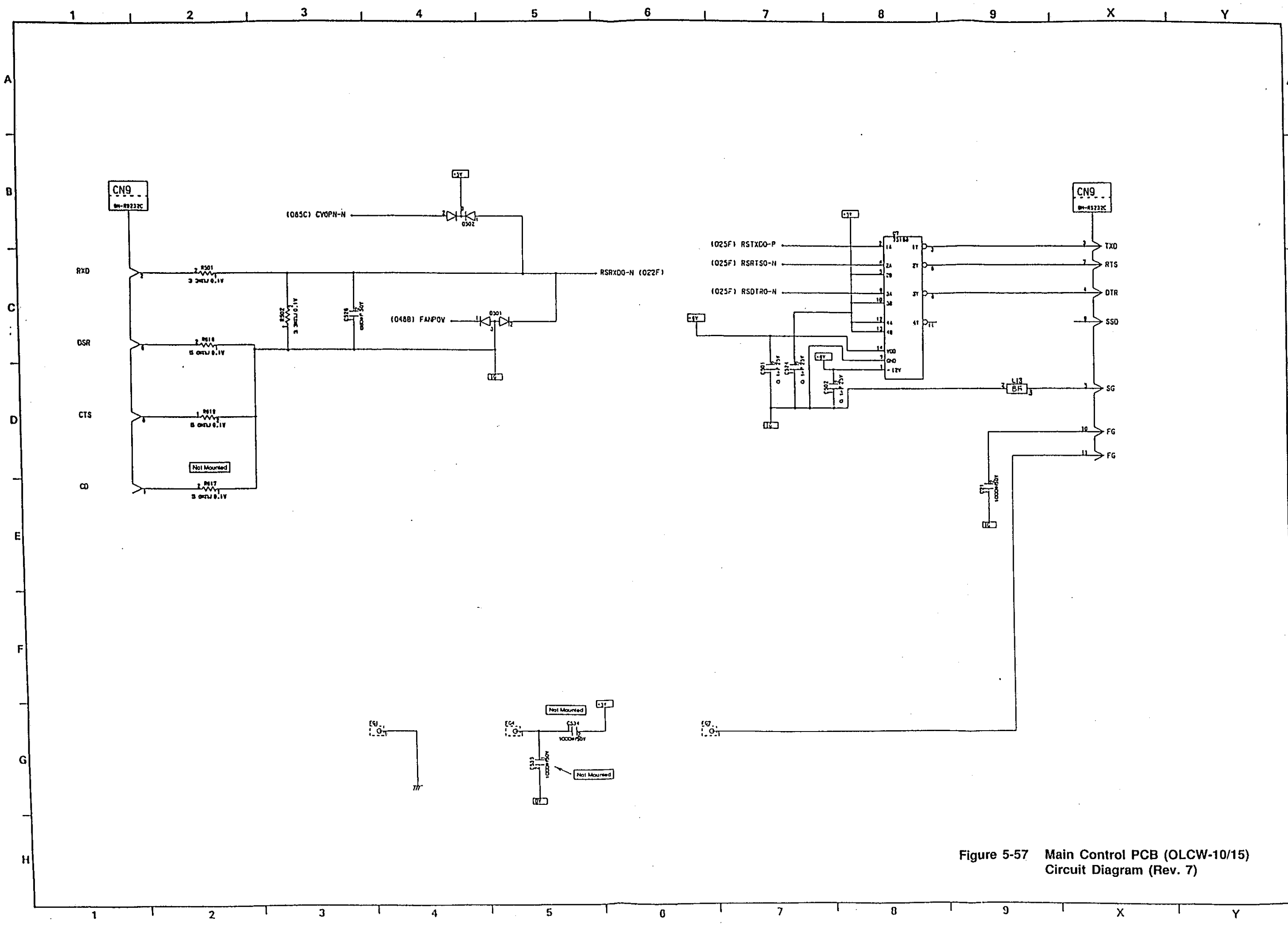


Figure 5-57 Main Control PCB (OLCW-10/15) Circuit Diagram (Rev. 7)

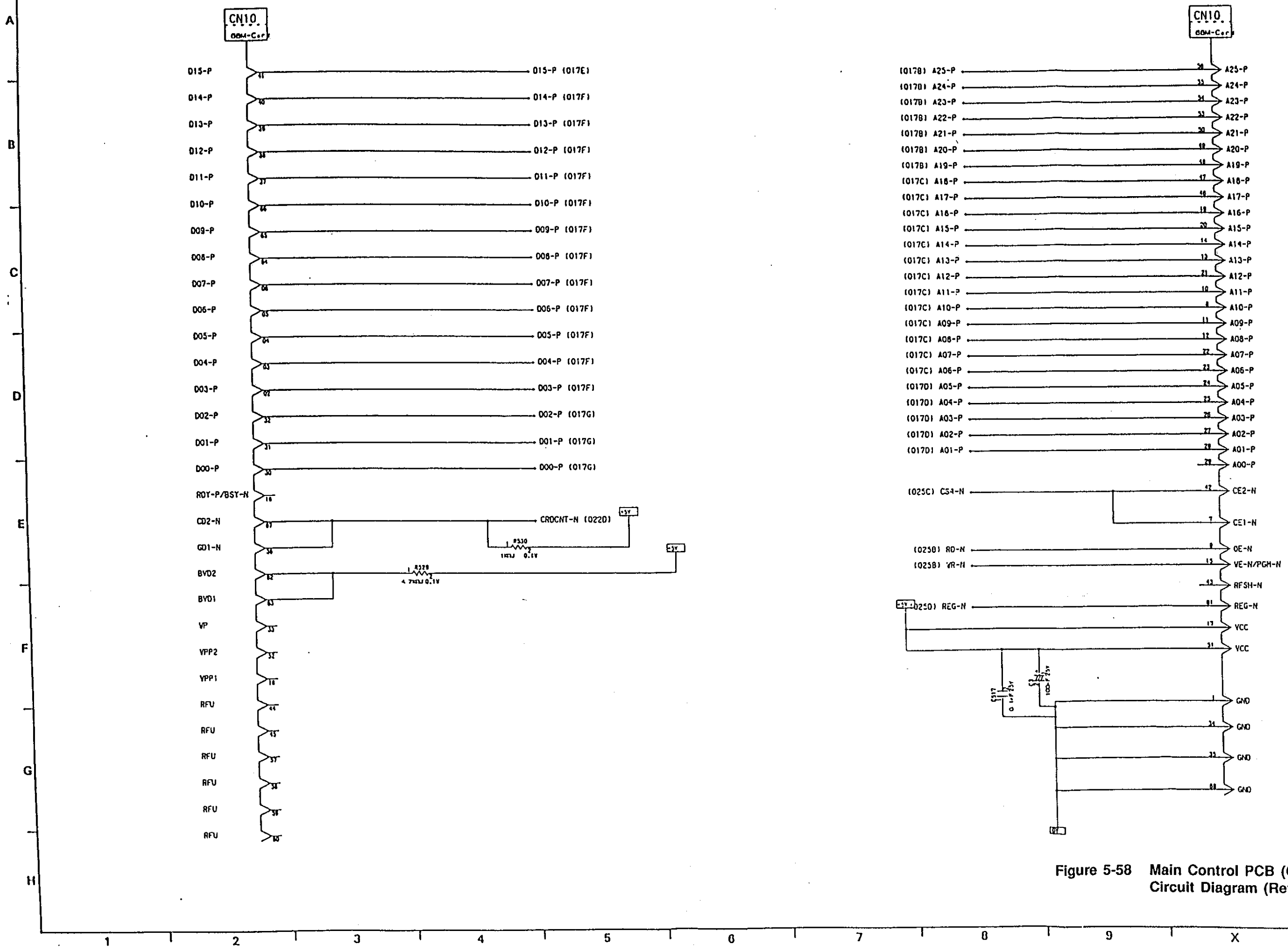


Figure 5-58 Main Control PCB (OLCW-11/15) Circuit Diagram (Rev. 7)

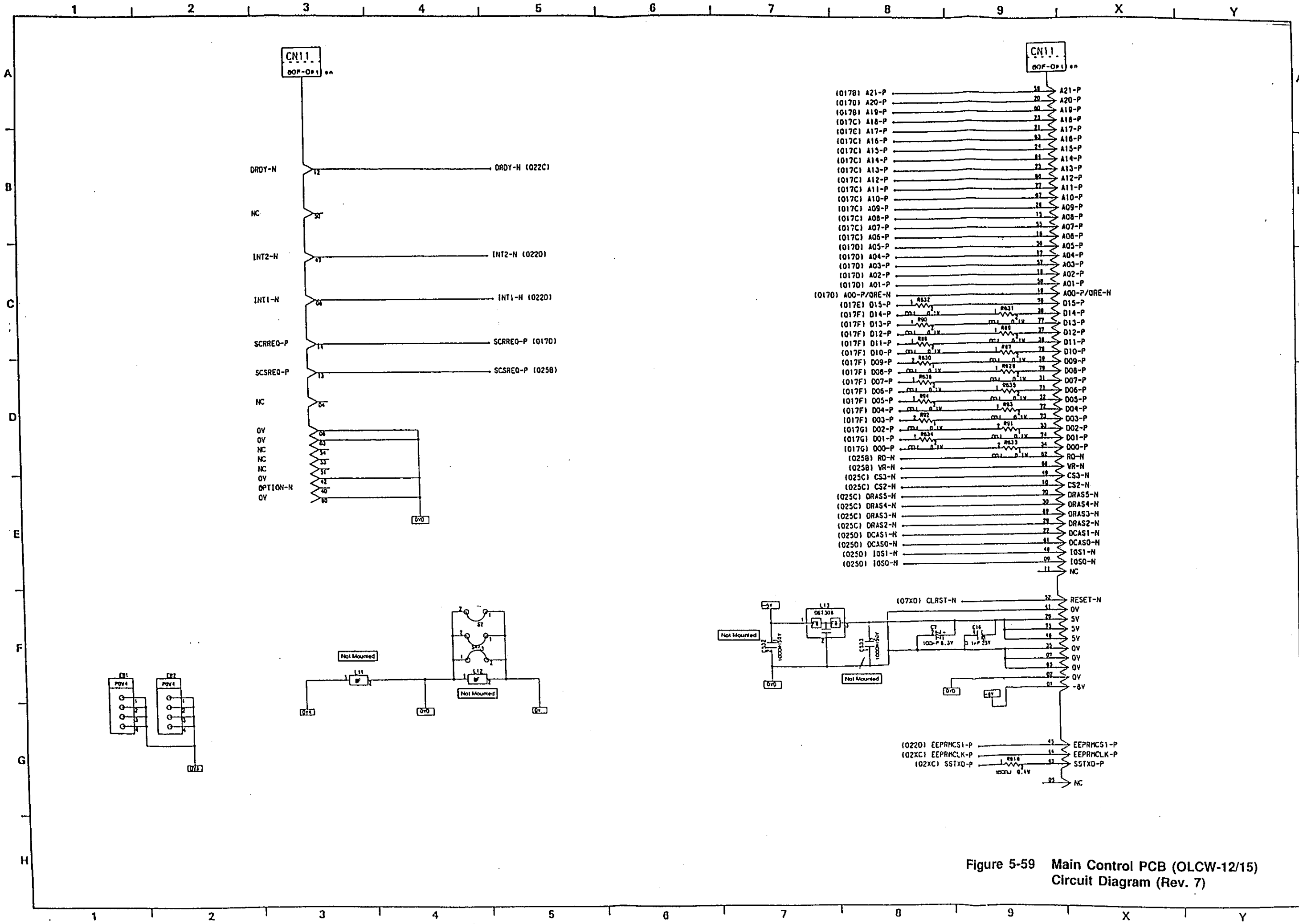


Figure 5-59 Main Control PCB (OLCW-12/15) Circuit Diagram (Rev. 7)

Connector Name: 14F-LED
Part Number: 224A3590P0140
Part Symbol: CN4

Pin No.	Signal Name	Location	
1	0V	057G	
2	0V	057G	
3	5V	057F	
4	5V	057F	
5	0V	057G	
6	HDDTO-P	057B	
7	NC	057B	
8	HDCLK-P	057C	
9	HDLD-P	057C	
10	STB1-N	057C	
11	STB2-N	057D	
12	STB3-N	057D	
13	STB4-N	057D	
14	FG	057H	

Connector Name: 32M-Power
Part Number: 224A3368P0320
Part Symbol: CN7

Pin No.	Signal Name	Location	
1	TRSEL2-P	08YG	
2	TRSEL1-P	08YF	
3	NC	082F	
4	+30V	082D	
5	THERM	082C	
6	CVOPN-N	082C	
7	WRSNS-N	082B	
8	TNRSNS-N	082C	
9	PAPER-N	082C	
10	PSOUT-N	082B	
11	+5V	082D	
12	+5V	082D	
13	0V	082D	
14	0V	082D	
15	0V	082D	
16	PSIN1-N	082B	
17	0V	082E	
18	PSIN2-N	082B	
19	0V	082E	
20	HEATON-N	08YF	
21	0V	082E	
22	TR1	08YB	
23	0V	082E	
24	OB1	08YD	
25	CH	08YC	
26	+5V	082D	
27	TR2	08YB	
28	-8V	082E	
29	OB2	08YE	
30	+8V	082D	
31	OVP	082E	
32	+30V	082D	
33	NC	082F	
34	NC	082F	

Connector Name: 36F-Centro
Part Number: 2204A1783P0362
Part Symbol: CN8

Pin No.	Signal Name	Location	
1	STB-N	092D	
2	DATA1-P	092C	
3	DATA2-P	092C	
4	DATA3-P	092C	
5	DATA4-P	092C	
6	DATA5-P	092C	
7	DATA6-P	092B	
8	DATA7-P	092B	
9	DATA8-P	092B	
10	ACK-N	09XE	
11	BUSY-P	09XD	
12	PE-P	09XE	
13	SEL-P	09XF	
14	AUTOFEED-P	092F	
15	N/C	09XD	
16	SG	09XB	
17	FG	09XA	
18	5V	09XG	
19	SG	09XB	
20	SG	09XB	
21	SG	09XB	
22	SG	09XB	
23	SG	09XC	
24	SG	09XC	
25	SG	09XC	
26	SG	09XC	
27	SG	09XC	
28	SG	09XC	
29	SG	09XC	
30	SG	09XC	
31	IPRIME-N	092E	
32	FAULT-N	09XF	
33	SG	09XC	
34	N/C	09XD	
35	HILEVEL	09XD	
36	SELIN-N	092F	
37	FG	09XG	
38	FG	09XG	

Connector Name: 3M-Fan
Part Number: 224A3528P0030
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	FANPOV	049B	
2	0V	049B	
3	FANALM-N	04XC	

Figure 5-60 Main Control PCB (OLCW-13/15) Circuit Diagram (Rev. 7)

Connector Name: 4M-DMotor
Part Number: 224A3357P0040
Part Symbol: CN2

Pin No.	Signal Name	Location	
1	DHPH1-N	049D	
2	DMPH1-P	049D	
3	DMPH2-N	049E	
4	DMPH2-P	049D	

Connector Name: 4M-RMotor
Part Number: 224A3357P0040
Part Symbol: CN3

Pin No.	Signal Name	Location	
1	RMPH1-N	049E	
2	RMPH1-P	049E	
3	RMPH2-N	049F	
4	RMPH2-P	049F	

Connector Name: 68M-Card
Part Number: 224A0121P0680
Part Symbol: CN10

Pin No.	Signal Name	Location	
1	GND	11XF	
02	D03-P	113D	
03	D04-P	113D	
04	D05-P	113C	
05	D06-P	113C	
06	D07-P	113C	
7	CE1-N	11XE	
8	A10-P	11XC	
9	OE-N	11XE	
10	A11-P	11XC	
11	A09-P	11XC	
12	A08-P	11XC	
13	A13-P	11XC	
14	A14-P	11XC	
15	WE-N/PGM-N	11XE	
16	RDY-P/BSY-N	113E	
17	VCC	11XF	
18	VPP1	113F	
19	A16-P	11XC	
20	A15-P	11XC	
21	A12-P	11XC	
22	A07-P	11XD	
23	A06-P	11XD	
24	A05-P	11XD	
25	A04-P	11XD	
26	A03-P	11XD	
27	A02-P	11XD	
28	A01-P	11XD	
29	A00-P	11XD	
30	D00-P	113D	
31	D01-P	113D	
32	D02-P	113D	
33	WP	113F	
34	GND	11XF	
35	GND	11XG	
36	GD1-N	113E	
37	D11-P	113B	
38	D12-P	113B	
39	D13-P	113B	
40	D14-P	113B	
41	D15-P	113A	
42	CE2-N	11XE	
43	RFSH-N	11XE	
44	RFU	113F	
45	RFU	113F	
46	A17-P	11XB	
47	A18-P	11XB	
48	A19-P	11XB	
49	A20-P	11XB	
50	A21-P	11XB	

Pin No.	Signal Name	Location	
51	VCC	11XF	
52	VPP2	113F	
53	A22-P	11XB	
54	A23-P	11XB	
55	A24-P	11XB	
56	A25-P	11XA	
57	RFU	113G	
58	RFU	113G	
59	RFU	113G	
60	RFU	113G	
61	REG-N	11XF	
62	BVD2	113E	
63	BVD1	113E	
64	D08-P	113C	
65	D09-P	113C	
66	D10-P	113B	
67	CD2-N	113E	
68	GND	11XG	

Figure 5-61 Main Control PCB (OLCW-14/15) Circuit Diagram (Rev. 7)

Connector Name: 6F-OPanel
Part Number: 224A3590P0060
Part Symbol: CN5

Pin No.	Signal Name	Location	
1	OPLD-N	068B	
2	0V	068C	
3	OPDTOUT-P	068B	
4	OPDTIN-P	069B	
5	5V	068C	
6	OPCLK-N	068B	

Connector Name: 80F-Option
Part Number: 224A3516P0800
Part Symbol: CN11

Pin No.	Signal Name	Location	
01	-8V	129F	
02	0V	129F	
03	0V	123D	
04	NC	123D	
05	NC	129G	
06	0V	123D	
07	0V	129F	
08	INT1-N	123C	
09	IOSO-N	129E	
10	CS2-N	129D	
11	NC	129E	
12	DRDY-N	123B	
13	SCSREQ-P	123C	
14	SCRREQ-P	123C	
15	A08-P	129B	
16	A06-P	129B	
17	A04-P	129C	
18	A02-P	129C	
19	A00-P/ORE-N	129C	
20	A20-P	129A	
21	A17-P	129A	
22	DCAS1-N	129E	
23	A18-P	129A	
24	A15-P	129B	
25	A13-P	129B	
26	5V	129F	
27	A11-P	129B	
28	A09-P	129B	
29	DRAS2-N	129E	
30	DRAS4-N	129E	
31	D07-P	129D	
32	D05-P	129D	
33	D02-P	129D	
34	D00-P	129D	
35	0V	129F	
36	D14-P	129C	
37	D12-P	129C	
38	D11-P	129C	
39	D09-P	129C	
40	OPTION-N	123D	
41	0V	129E	
42	0V	123D	
43	SSTXD-P	129G	
44	EEPRMCLK-P	129G	
45	EEPRMCS1-P	129G	
46	5V	129F	
47	INT2-N	123B	
48	IOS1-N	129E	
49	CS3-N	129D	
50	NC	123B	

Pin No.	Signal Name	Location	
51	NC	123D	
52	RESET-N	129E	
53	NC	123D	
54	NC	123D	
55	A07-P	129B	
56	A05-P	129B	
57	A03-P	129C	
58	A01-P	129C	
59	A21-P	129A	
60	A19-P	129A	
61	DCASO-N	129E	
62	RD-N	129D	
63	A16-P	129B	
64	A14-P	129B	
65	0V	129F	
66	A12-P	129B	
67	A10-P	129B	
68	WR-N	129D	
69	DRAS3-N	129E	
70	DRAS5-N	129E	
71	D06-P	129D	
72	D04-P	129D	
73	D03-P	129D	
74	D01-P	129D	
75	5V	129F	
76	D15-P	129C	
77	D13-P	129C	
78	D10-P	129C	
79	D08-P	129C	
80	0V	123D	

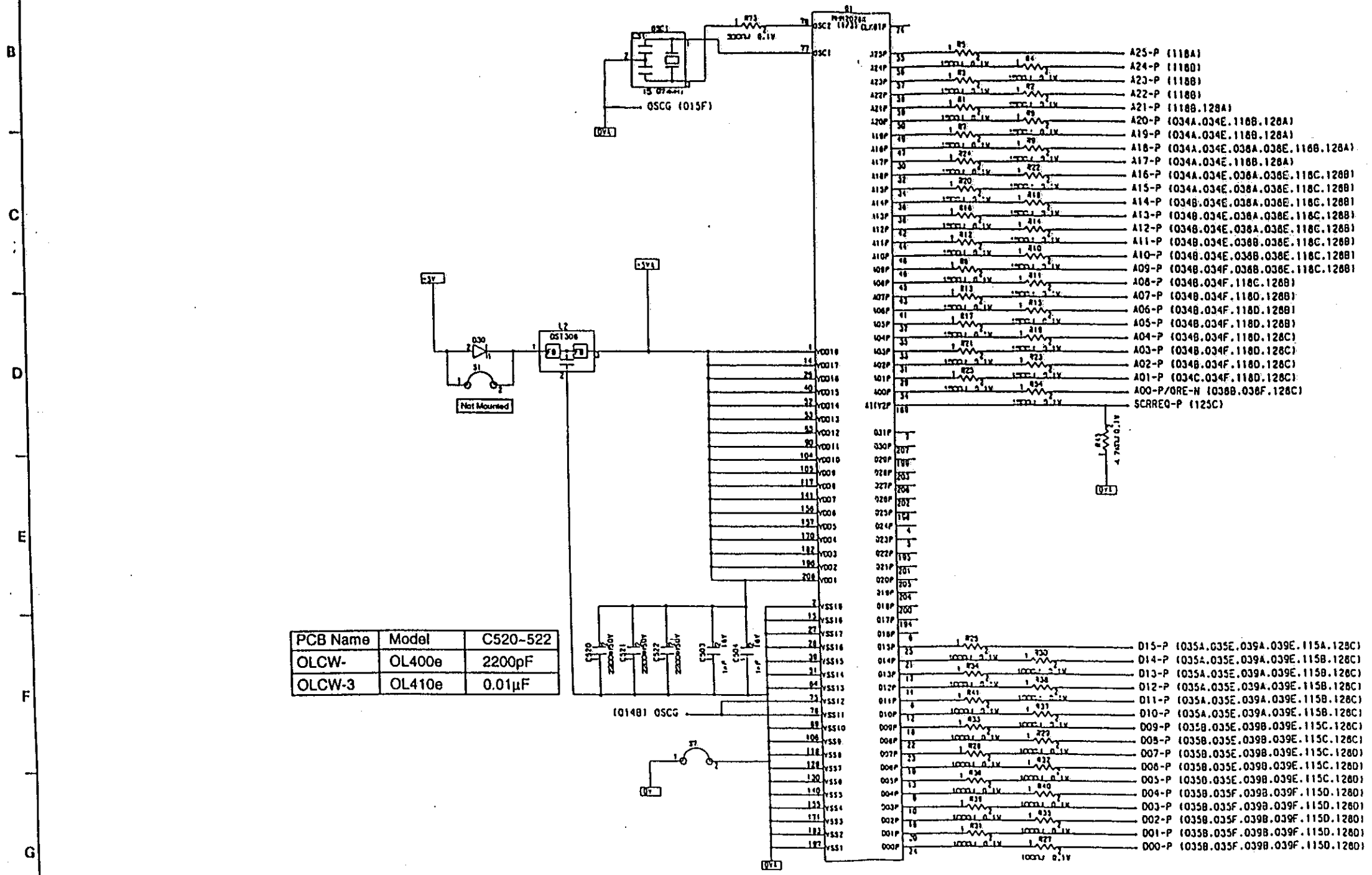
Connector Name: 8F-OptFdr
Part Number: 221A1630P0801
Part Symbol: CN6

Pin No.	Signal Name	Location	
1	OPTPSIN-N	068F	
2	OPTSCLK-N	068E	
3	OPTSD-P	068D	
4	OPTSDR-N	069E	
5	OVP	068F	
6	30V	068E	
7	0V	068F	
8	5V	068F	
9	FG	068G	
10	FG	068G	
11	FG	068G	

Connector Name: 9M-RS232C
Part Number: 220A1376P0095
Part Symbol: CN9

Pin No.	Signal Name	Location	
1	CD	102D	
2	RXD	102C	
3	TXD	10XB	
4	DTR	10XC	
5	SG	10XD	
6	DSR	102C	
7	RTS	10XC	
8	CTS	102D	
9	SSD	10XC	
10	FG	10XD	
11	FG	10XD	

Figure 5-62 Main Control PCB (OLCW-15/15) Circuit Diagram (Rev. 7)



PCB Name	Model	C520~522
OLCW-	OL400e	2200pF
OLCW-3	OL410e	0.01µF

Figure 5-63 Main Control PCB (OLCW-1/15) Circuit Diagram (Rev. 8)

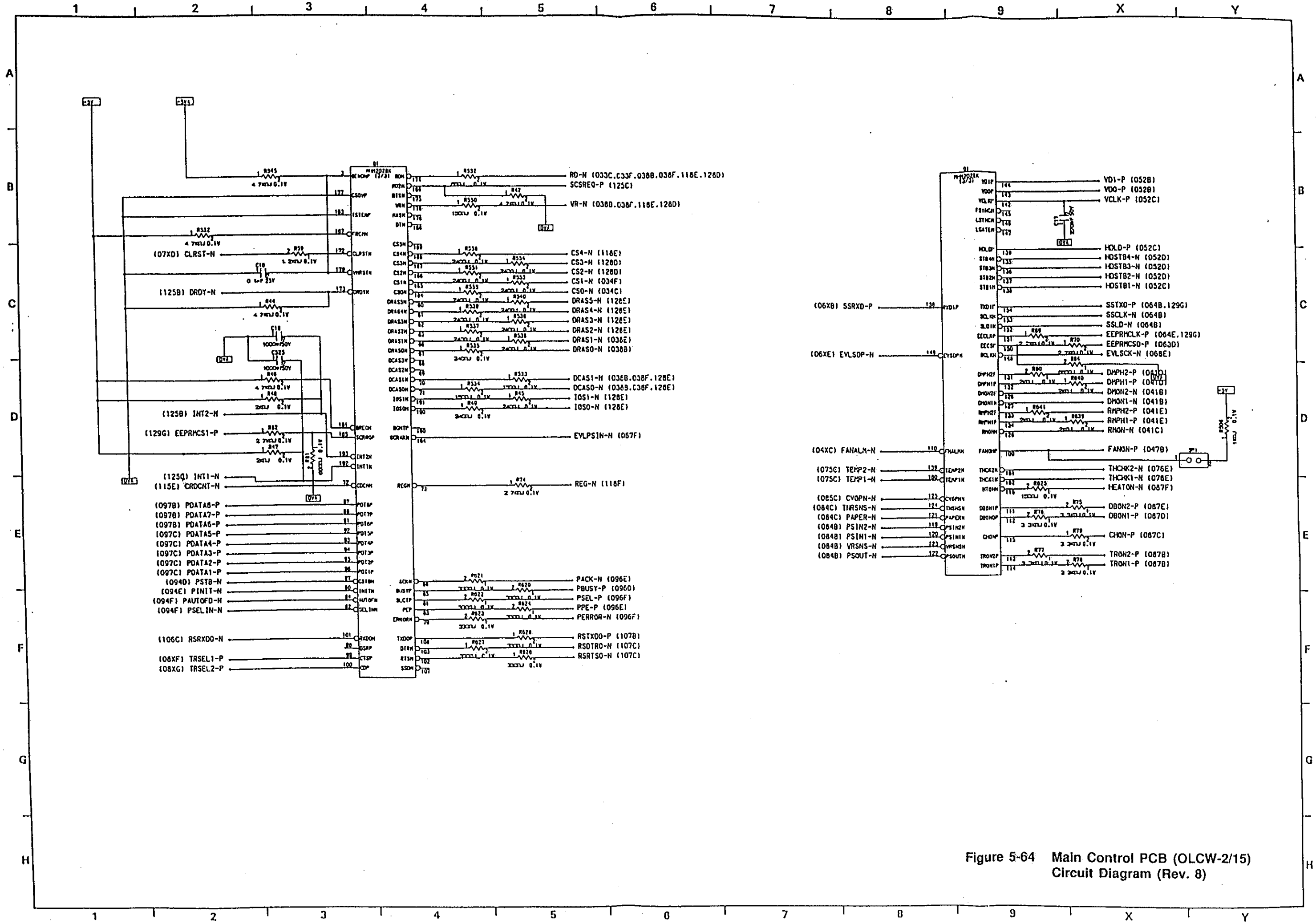


Figure 5-64 Main Control PCB (OLCW-2/15) Circuit Diagram (Rev. 8)

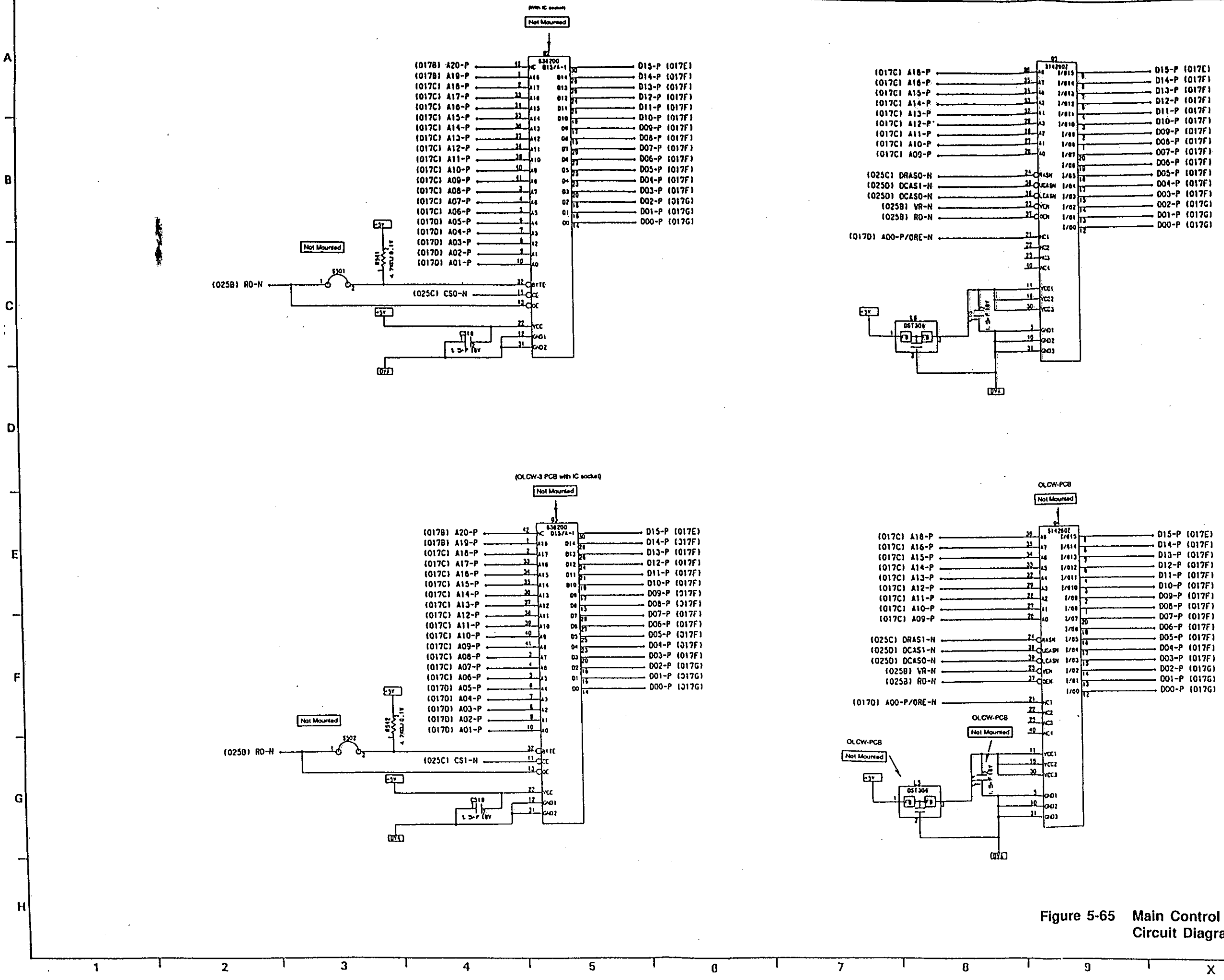


Figure 5-65 Main Control PCB (OLCW-3/15) Circuit Diagram (Rev. 8)

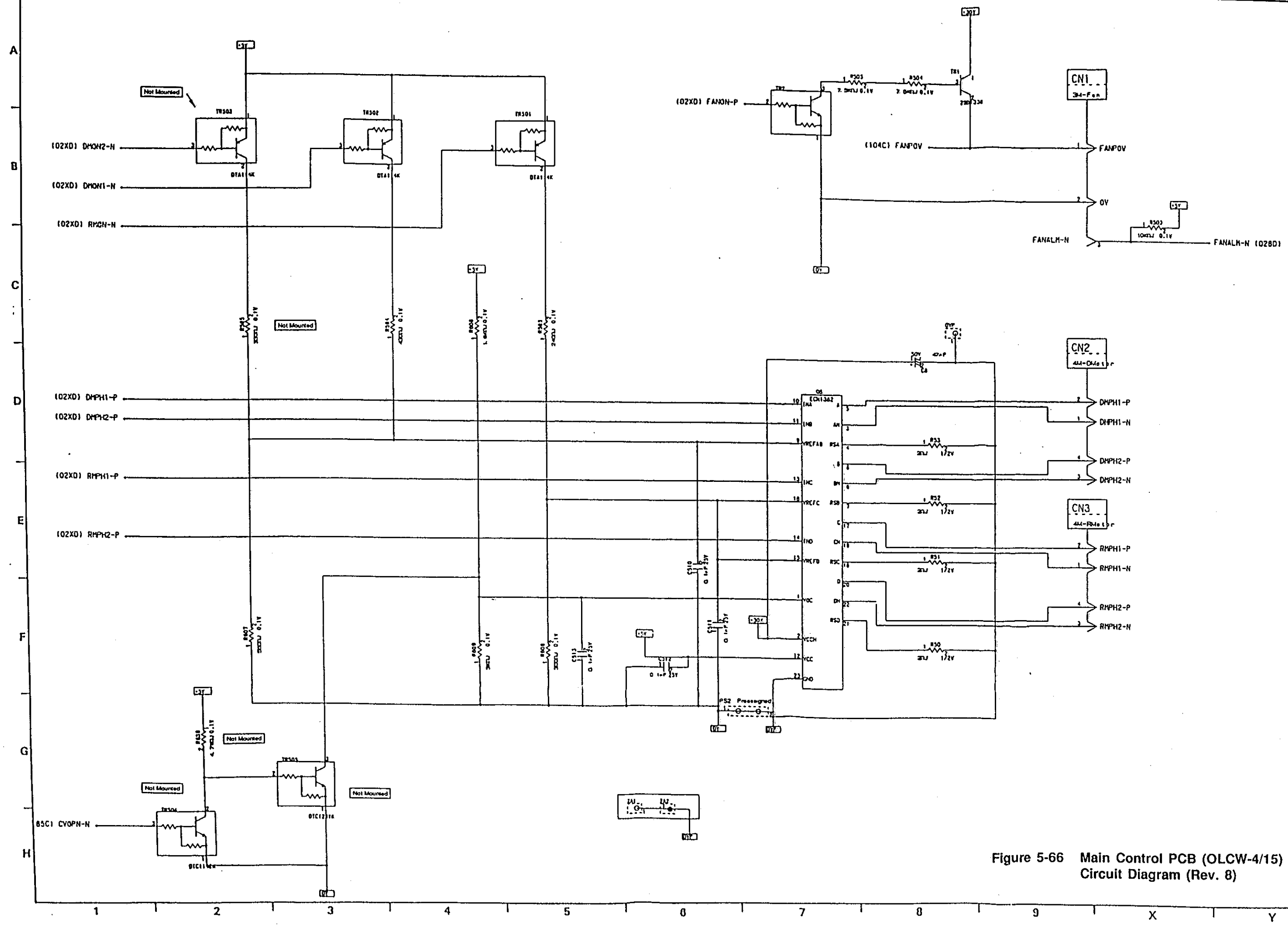


Figure 5-66 Main Control PCB (OLCW-4/15) Circuit Diagram (Rev. 8)

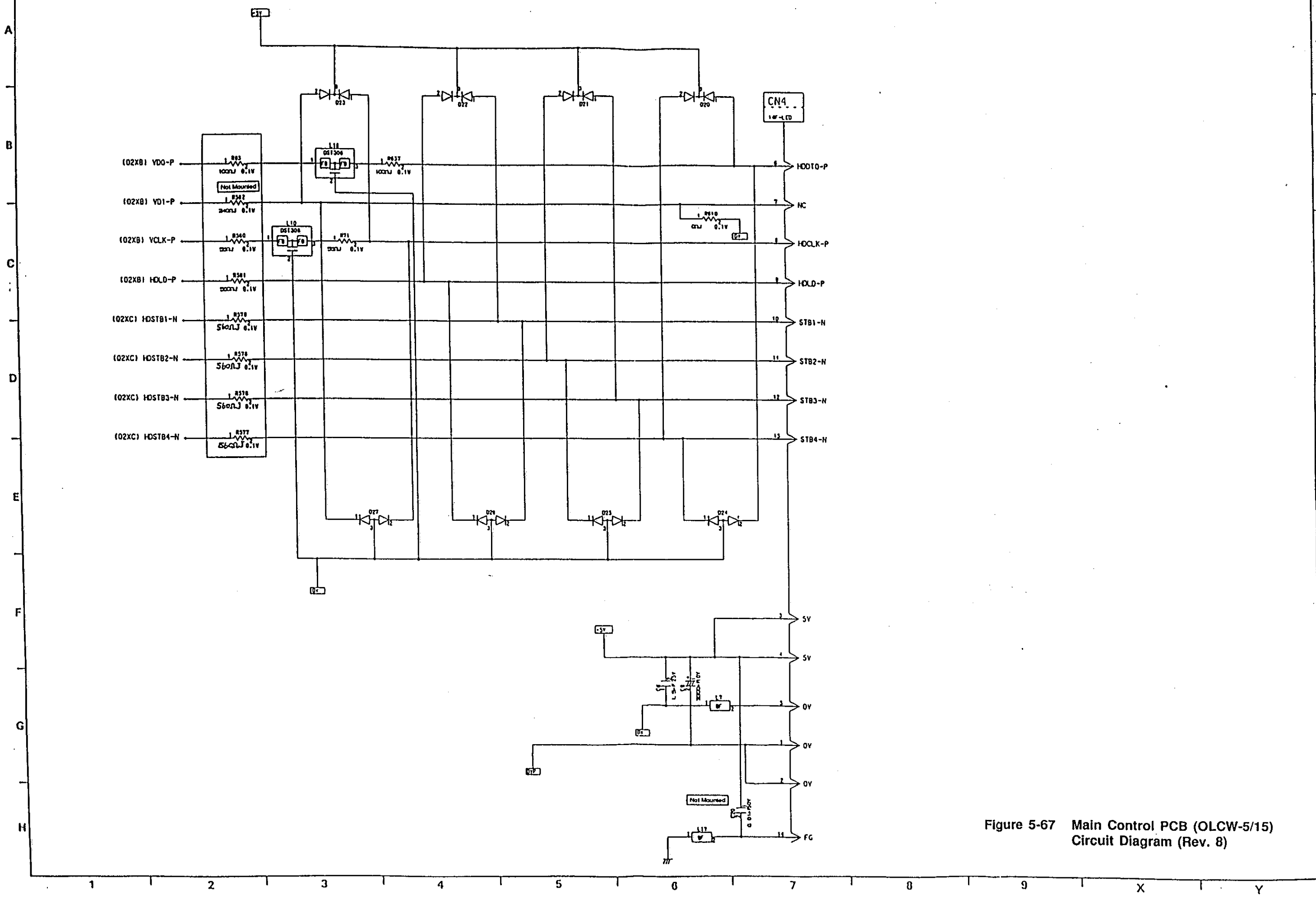


Figure 5-67 Main Control PCB (OLCW-5/15) Circuit Diagram (Rev. 8)

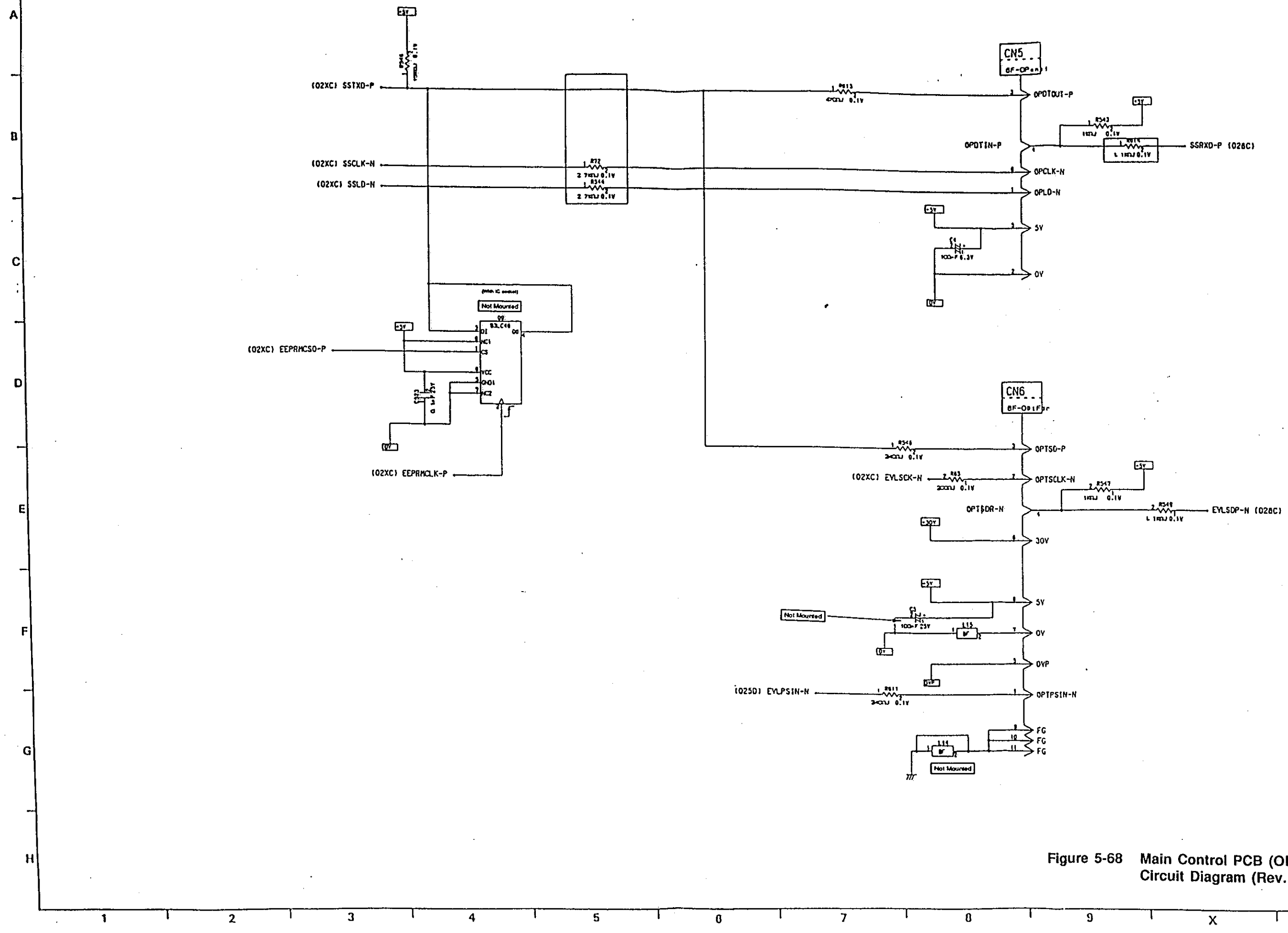


Figure 5-68 Main Control PCB (OLCW-6/15) Circuit Diagram (Rev. 8)

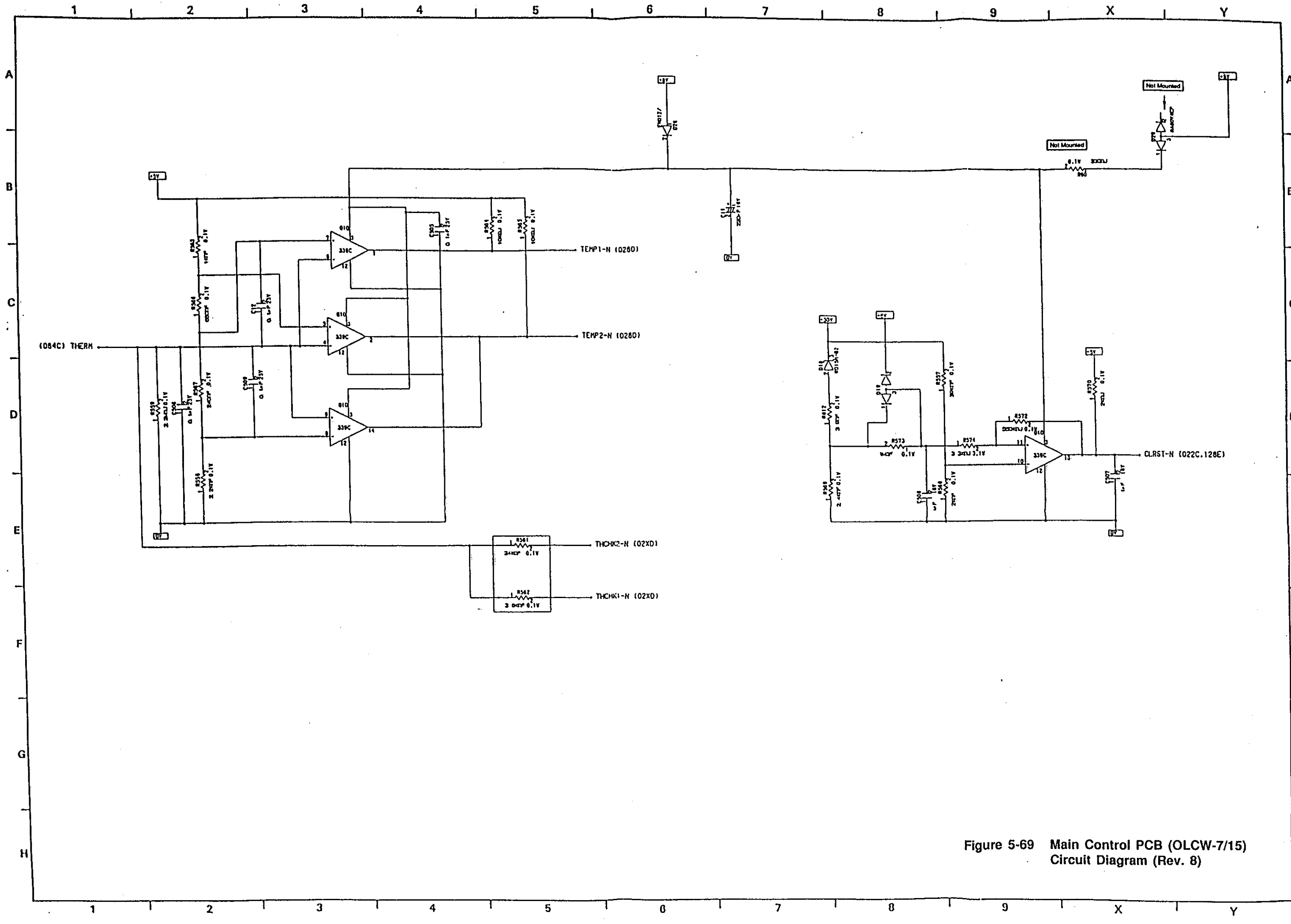


Figure 5-69 Main Control PCB (OLCW-7/15) Circuit Diagram (Rev. 8)

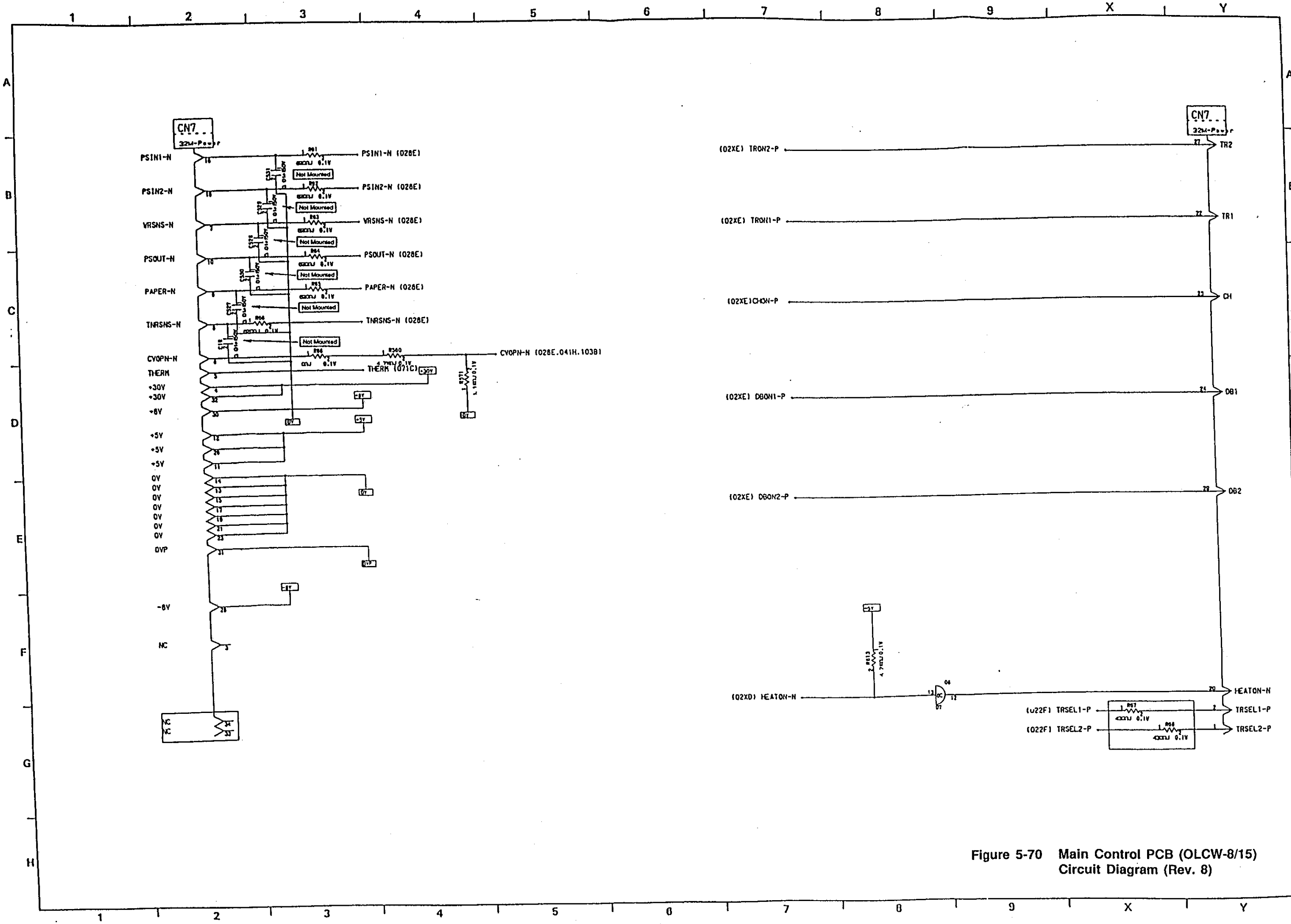
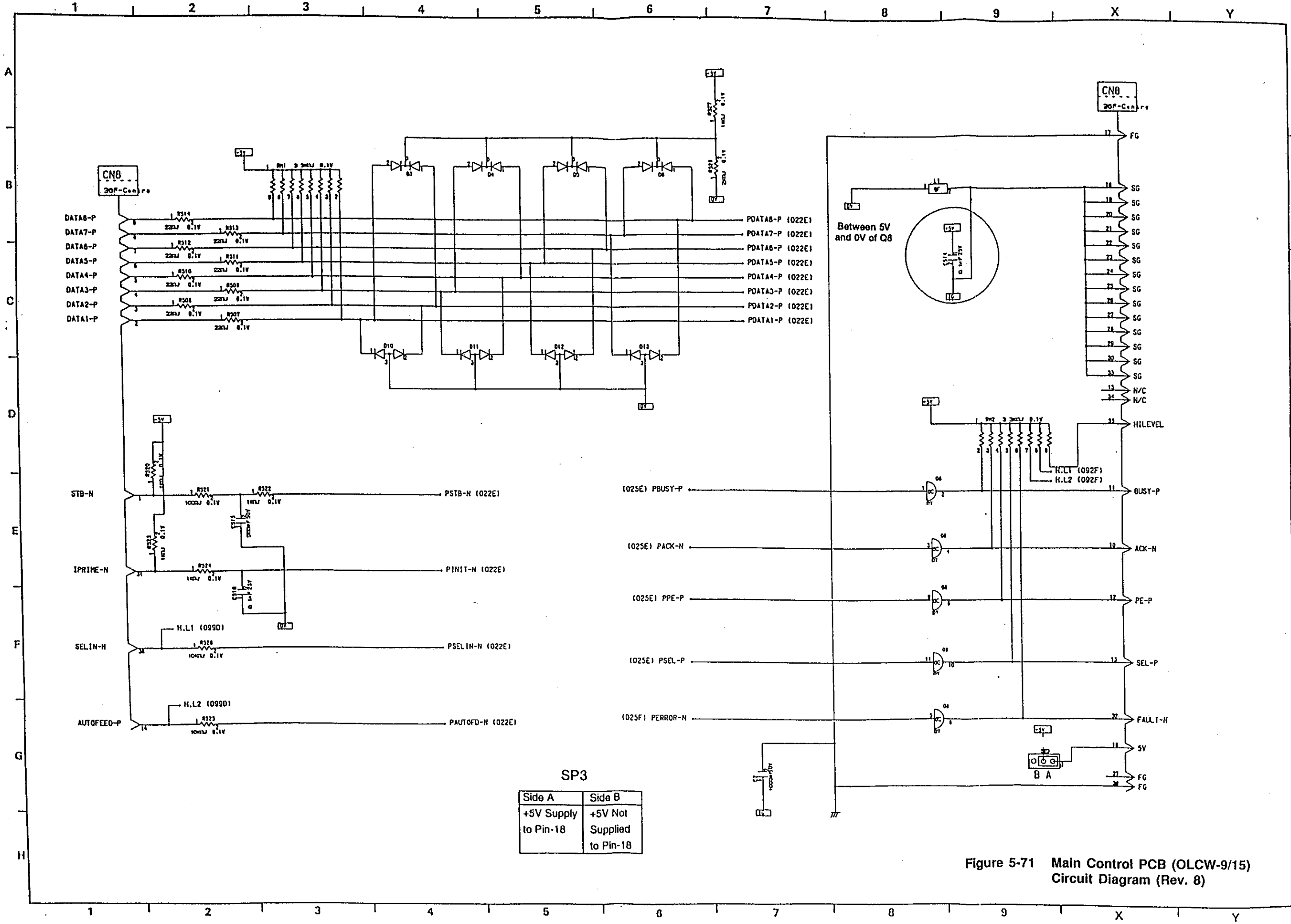


Figure 5-70 Main Control PCB (OLCW-8/15) Circuit Diagram (Rev. 8)



SP3

Side A	Side B
+5V Supply to Pin-18	+5V Not Supplied to Pin-18

Figure 5-71 Main Control PCB (OLCW-9/15) Circuit Diagram (Rev. 8)

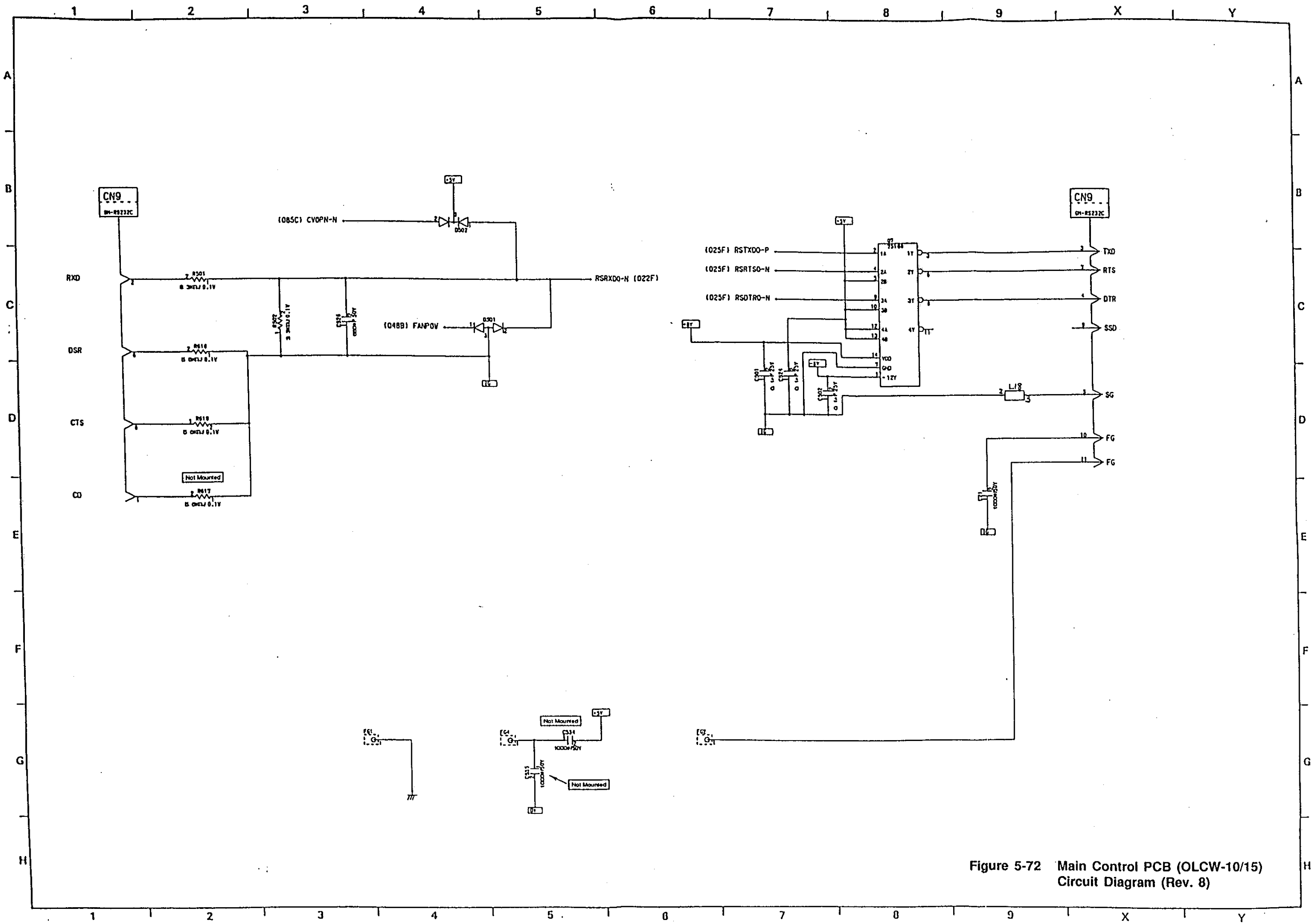


Figure 5-72 Main Control PCB (OLCW-10/15) Circuit Diagram (Rev. 8)

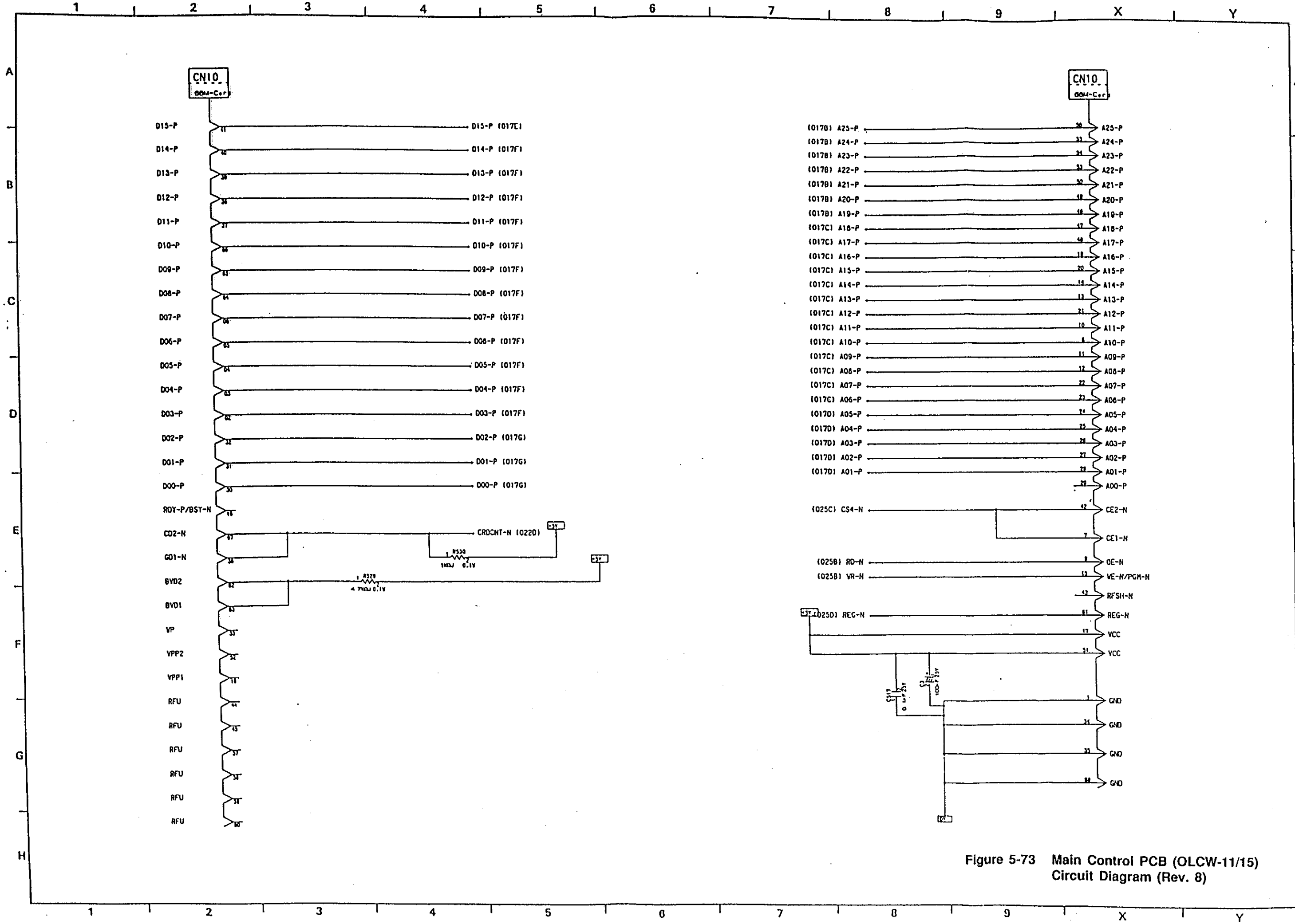


Figure 5-73 Main Control PCB (OLCW-11/15) Circuit Diagram (Rev. 8)

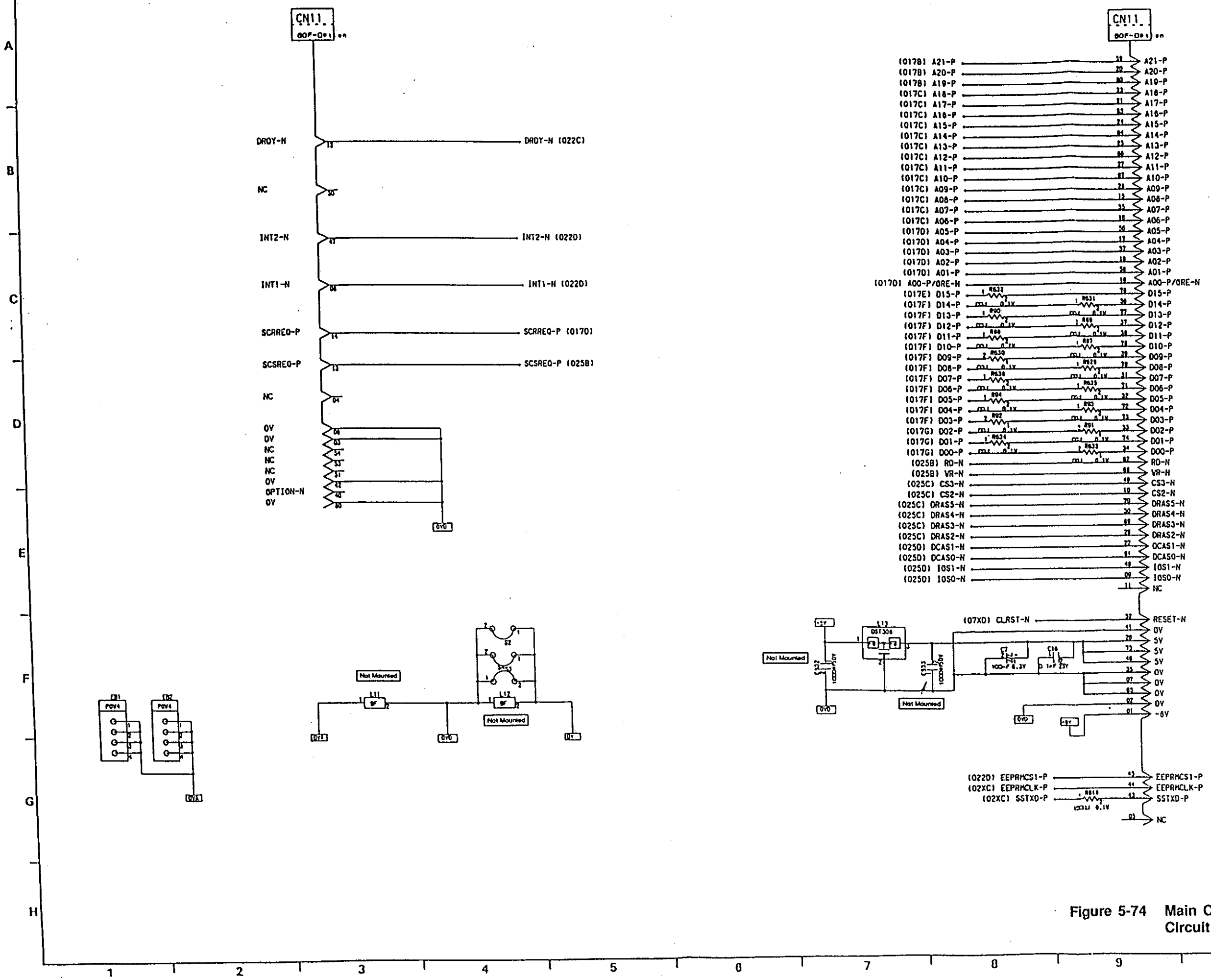


Figure 5-74 Main Control PCB (OLCW-12/15) Circuit Diagram (Rev. 8)

Connector Name: 14F-LED
Part Number: 224A3590P0140
Part Symbol: CN4

Pin No.	Signal Name	Location	
1	0V	057G	
2	0V	057G	
3	5V	057F	
4	5V	057F	
5	0V	057G	
6	HDDTO-P	057B	
7	NC	057B	
8	HDCLK-P	057C	
9	HDLD-P	057C	
10	STB1-N	057C	
11	STB2-N	057D	
12	STB3-N	057D	
13	STB4-N	057D	
14	FG	057H	

Connector Name: 32M-Power
Part Number: 224A3368P0320
Part Symbol: CN7

Pin No.	Signal Name	Location	
1	TRSEL2-P	08YG	
2	TRSEL1-P	08YF	
3	NC	082F	
4	+30V	082D	
5	THERM	082C	
6	CVOPN-N	082C	
7	VRSNS-N	082B	
8	TNRSNS-N	082C	
9	PAPER-N	082C	
10	PSOUT-N	082B	
11	+5V	082D	
12	+5V	082D	
13	0V	082D	
14	0V	082D	
15	0V	082D	
16	PSIN1-N	082B	
17	0V	082E	
18	PSIN2-N	082B	
19	0V	082E	
20	HEATON-N	08YF	
21	0V	082E	
22	TR1	08YB	
23	0V	082E	
24	DB1	08YD	
25	CH	08YC	
26	+5V	082D	
27	TR2	08YB	
28	-8V	082E	
29	DB2	08YE	
30	+8V	082D	
31	OVP	082E	
32	+30V	082D	
33	NC	082F	
34	NC	082F	

Connector Name: 36F-Centro
Part Number: 220A1783P0362
Part Symbol: CN8

Pin No.	Signal Name	Location	
1	STB-N	092D	
2	DATA1-P	092C	
3	DATA2-P	092C	
4	DATA3-P	092C	
5	DATA4-P	092C	
6	DATA5-P	092C	
7	DATA6-P	092B	
8	DATA7-P	092B	
9	DATA8-P	092B	
10	ACK-N	09XE	
11	BUSY-P	09XD	
12	PE-P	09XE	
13	SEL-P	09XF	
14	AUTOFEED-P	092F	
15	N/C	09XD	
16	SG	09XB	
17	FG	09XA	
18	5V	09XG	
19	SG	09XB	
20	SG	09XB	
21	SG	09XB	
22	SG	09XB	
23	SG	09XC	
24	SG	09XC	
25	SG	09XC	
26	SG	09XC	
27	SG	09XC	
28	SG	09XC	
29	SG	09XC	
30	SG	09XC	
31	IPRIME-N	092E	
32	FAULT-N	09XF	
33	SG	09XC	
34	N/C	09XD	
35	HILEVEL	09XD	
36	SELIN-N	092F	
37	FG	09XG	
38	FG	09XG	

Connector Name: 3M-Fan
Part Number: 224A3528P0030
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	FANPOW	049B	
2	0V	049B	
3	FANALM-N	04XC	

Figure 5-75 Main Control PCB (OLCW-13/15) Circuit Diagram (Rev. 8)

Connector Name: 4M-DMotor
Part Number: 224A3357P0040
Part Symbol: CN2

Pin No.	Signal Name	Location	
1	DHPH1-N	049D	
2	DMPH1-P	049D	
3	DMPH2-N	049E	
4	DMPH2-P	049D	

Connector Name: 4M-RMotor
Part Number: 224A3357P0040
Part Symbol: CN3

Pin No.	Signal Name	Location	
1	RMPH1-N	049E	
2	RMPH1-P	049E	
3	RMPH2-N	049F	
4	RMPH2-P	049F	

Connector Name: 68M-Card
Part Number: 224A0121P0680
Part Symbol: CN10

Pin No.	Signal Name	Location	
1	GND	11XF	
02	D03-P	113D	
03	D04-P	113D	
04	D05-P	113C	
05	D06-P	113C	
06	D07-P	113C	
7	CE1-N	11XE	
8	A10-P	11XC	
9	OE-N	11XE	
10	A11-P	11XC	
11	A09-P	11XC	
12	A08-P	11XC	
13	A13-P	11XC	
14	A14-P	11XC	
15	WE-N/PGM-N	11XE	
16	RDY-P/BSY-N	113E	
17	VCC	11XF	
18	VPP1	113F	
19	A16-P	11XC	
20	A15-P	11XC	
21	A12-P	11XC	
22	A07-P	11XD	
23	A06-P	11XD	
24	A05-P	11XD	
25	A04-P	11XD	
26	A03-P	11XD	
27	A02-P	11XD	
28	A01-P	11XD	
29	A00-P	11XD	
30	D00-P	113D	
31	D01-P	113D	
32	D02-P	113D	
33	VP	113F	
34	GND	11XF	
35	GND	11XG	
36	GD1-N	113E	
37	D11-P	113B	
38	D12-P	113B	
39	D13-P	113B	
40	D14-P	113B	
41	D15-P	113A	
42	CE2-N	11XE	
43	RFSH-N	11XE	
44	RFU	113F	
45	RFU	113F	
46	A17-P	11XB	
47	A18-P	11XB	
48	A19-P	11XB	
49	A20-P	11XB	
50	A21-P	11XB	

Pin No.	Signal Name	Location	
51	VCC	11XF	
52	VPP2	113F	
53	A22-P	11XB	
54	A23-P	11XB	
55	A24-P	11XB	
56	A25-P	11XA	
57	RFU	113G	
58	RFU	113G	
59	RFU	113G	
60	RFU	113G	
61	REG-N	11XF	
62	BVD2	113E	
63	BVD1	113E	
64	D08-P	113C	
65	D09-P	113C	
66	D10-P	113B	
67	CD2-N	113E	
68	GND	11XG	

Figure 5-76 Main Control PCB (OLCW-14/15) Circuit Diagram (Rev. 8)

Connector Name: 6F-OPanel
Part Number: 224A3690P0060
Part Symbol: CN5

Pin No.	Signal Name	Location	
1	0PLD-N	068B	
2	0V	068C	
3	0PDT0UT-P	068B	
4	0PDTIN-P	069B	
5	5V	068C	
6	0PCLK-N	068B	

Connector Name: 80F-Option
Part Number: 224A3516P0800
Part Symbol: CN11

Pin No.	Signal Name	Location	
01	-8V	129F	
02	0V	129F	
03	0V	123D	
04	NC	123D	
05	NC	129G	
06	0V	123D	
07	0V	129F	
08	INT1-N	123C	
09	I0S0-N	129E	
10	CS2-N	129D	
11	NC	129E	
12	DRDY-N	123B	
13	SCSREQ-P	123C	
14	SCRREQ-P	123C	
15	A08-P	129B	
16	A06-P	129B	
17	A04-P	129C	
18	A02-P	129C	
19	A00-P/0RE-N	129C	
20	A20-P	129A	
21	A17-P	129A	
22	DCAS1-N	129E	
23	A18-P	129A	
24	A15-P	129B	
25	A13-P	129B	
26	5V	129F	
27	A11-P	129B	
28	A09-P	129B	
29	DRAS2-N	129E	
30	DRAS4-N	129E	
31	D07-P	129D	
32	D05-P	129D	
33	D02-P	129D	
34	D00-P	129D	
35	0V	129F	
36	D14-P	129C	
37	D12-P	129C	
38	D11-P	129C	
39	D09-P	129C	
40	0PTI0N-N	123D	
41	0V	129E	
42	0V	123D	
43	SSTXD-P	129G	
44	EEPRMCLK-P	129G	
45	EEPRMCS1-P	129G	
46	5V	129F	
47	INT2-N	123B	
48	I0S1-N	129E	
49	CS3-N	129D	
50	NC	123B	

Pin No.	Signal Name	Location	
51	NC	123D	
52	RESET-N	129E	
53	NC	123D	
54	NC	123D	
55	A07-P	129B	
56	A05-P	129B	
57	A03-P	129C	
58	A01-P	129C	
59	A21-P	129A	
60	A19-P	129A	
61	DCAS0-N	129E	
62	RD-N	129D	
63	A16-P	129B	
64	A14-P	129B	
65	0V	129F	
66	A12-P	129B	
67	A10-P	129B	
68	WR-N	129D	
69	DRAS3-N	129E	
70	DRAS5-N	129E	
71	D06-P	129D	
72	D04-P	129D	
73	D03-P	129D	
74	D01-P	129D	
75	5V	129F	
76	D15-P	129C	
77	D13-P	129C	
78	D10-P	129C	
79	D08-P	129C	
80	0V	123D	

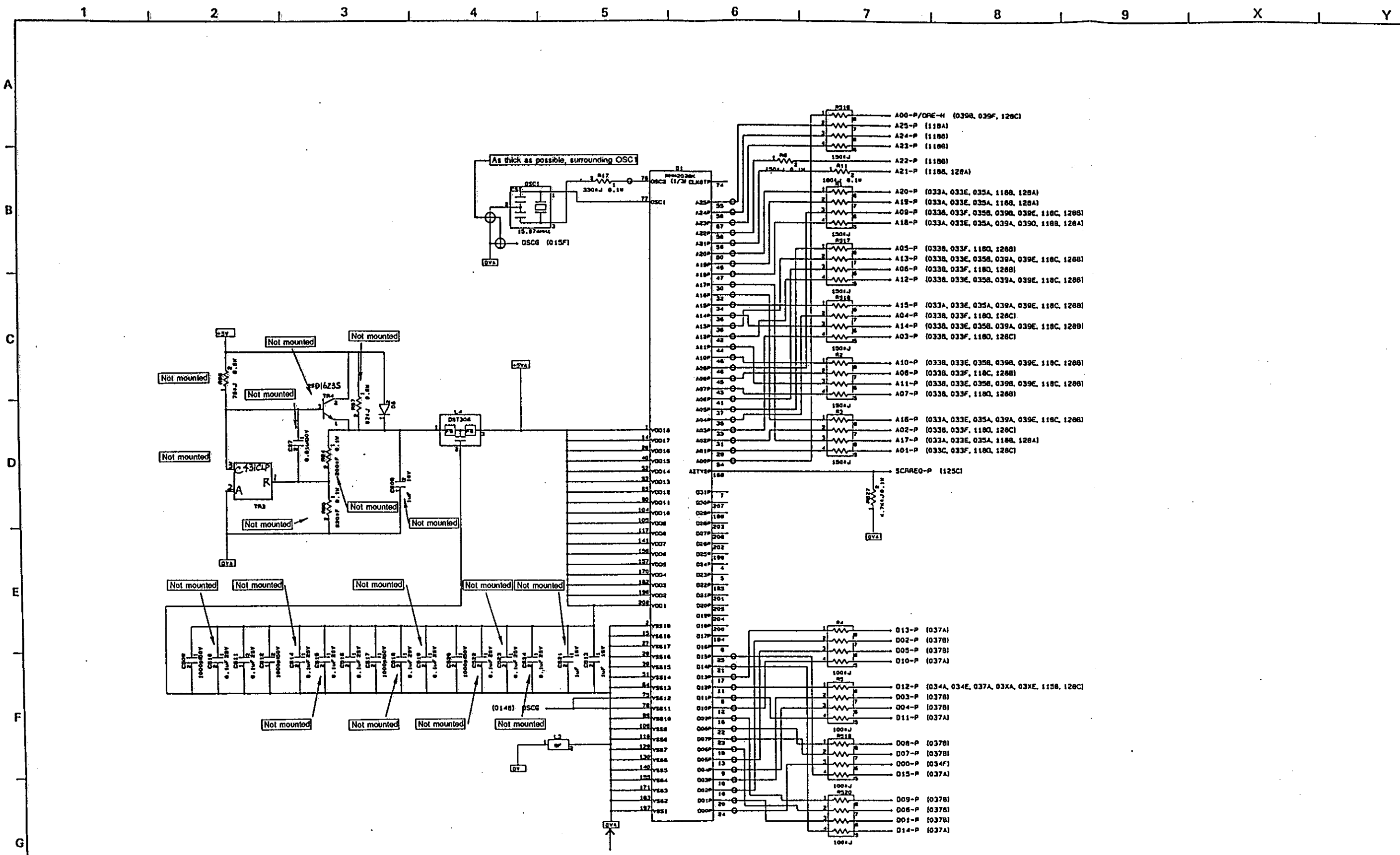
Connector Name: 8F-OptFdr
Part Number: 221A1630P0081
Part Symbol: CN6

Pin No.	Signal Name	Location	
1	0PTPSIN-N	068F	
2	0PTSCLK-N	068E	
3	0PTSD-P	068D	
4	0PTSDR-N	069E	
5	0VP	068F	
6	30V	068E	
7	0V	068F	
8	5V	068F	
9	FG	068G	
10	FG	068G	
11	FG	068G	

Connector Name: 9M-RS232C
Part Number: 220A1376P0095
Part Symbol: CN9

Pin No.	Signal Name	Location	
1	CD	102D	
2	RXD	102C	
3	TXD	10XB	
4	DTR	10XC	
5	SG	10XD	
6	DSR	102C	
7	RTS	10XC	
8	CTS	102D	
9	SSD	10XC	
10	FG	10XD	
11	FG	10XD	

Figure 5-77 Main Control PCB (OLCW-15/15) Circuit Diagram (Rev. 8)


As thick as possible, surrounding OSC1
OSC1
OSCG (015F)
Not mounted
Not mounted
Not mounted

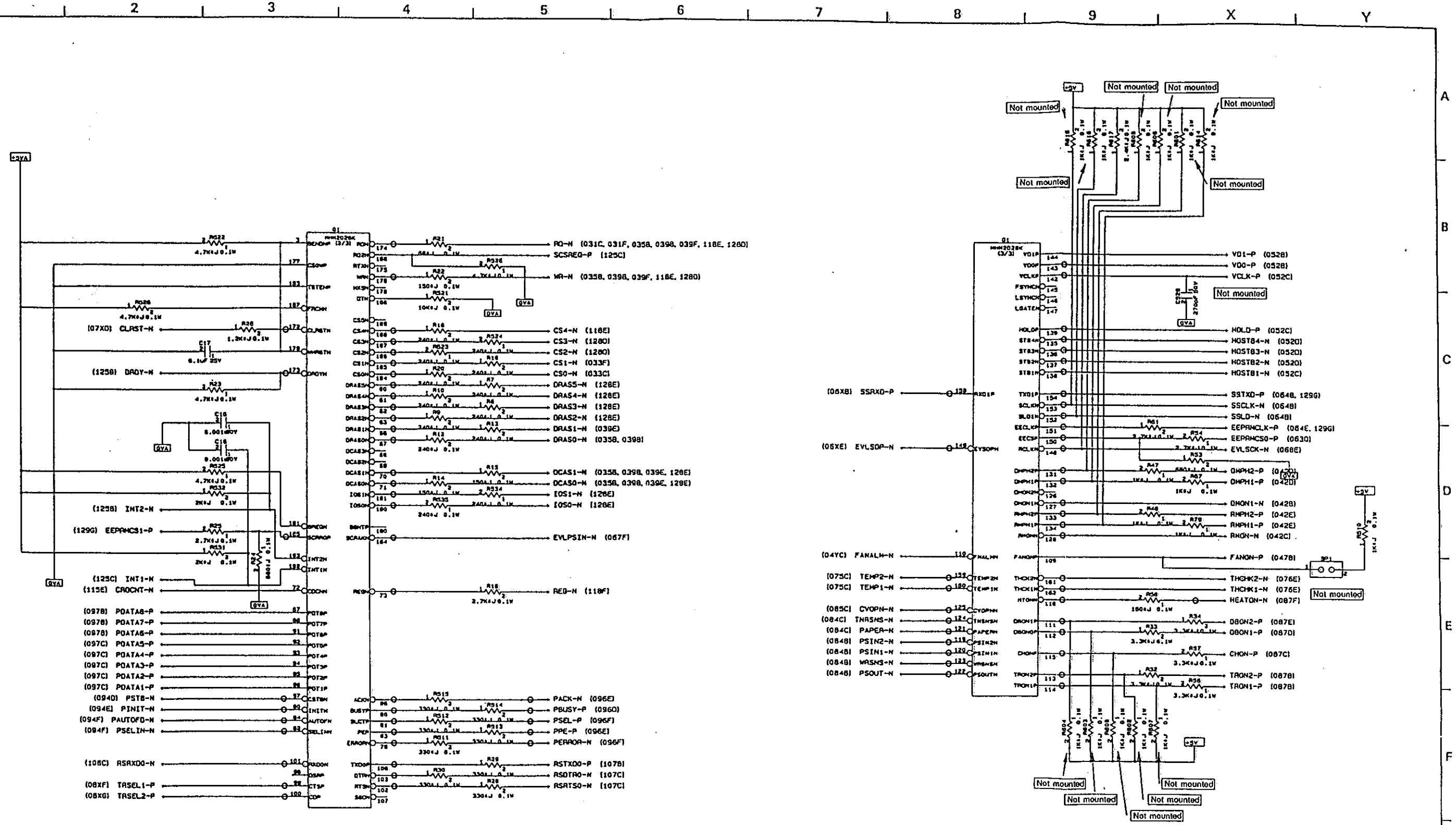


Figure 5-79 Main Control PCB (OLCL-2/16)

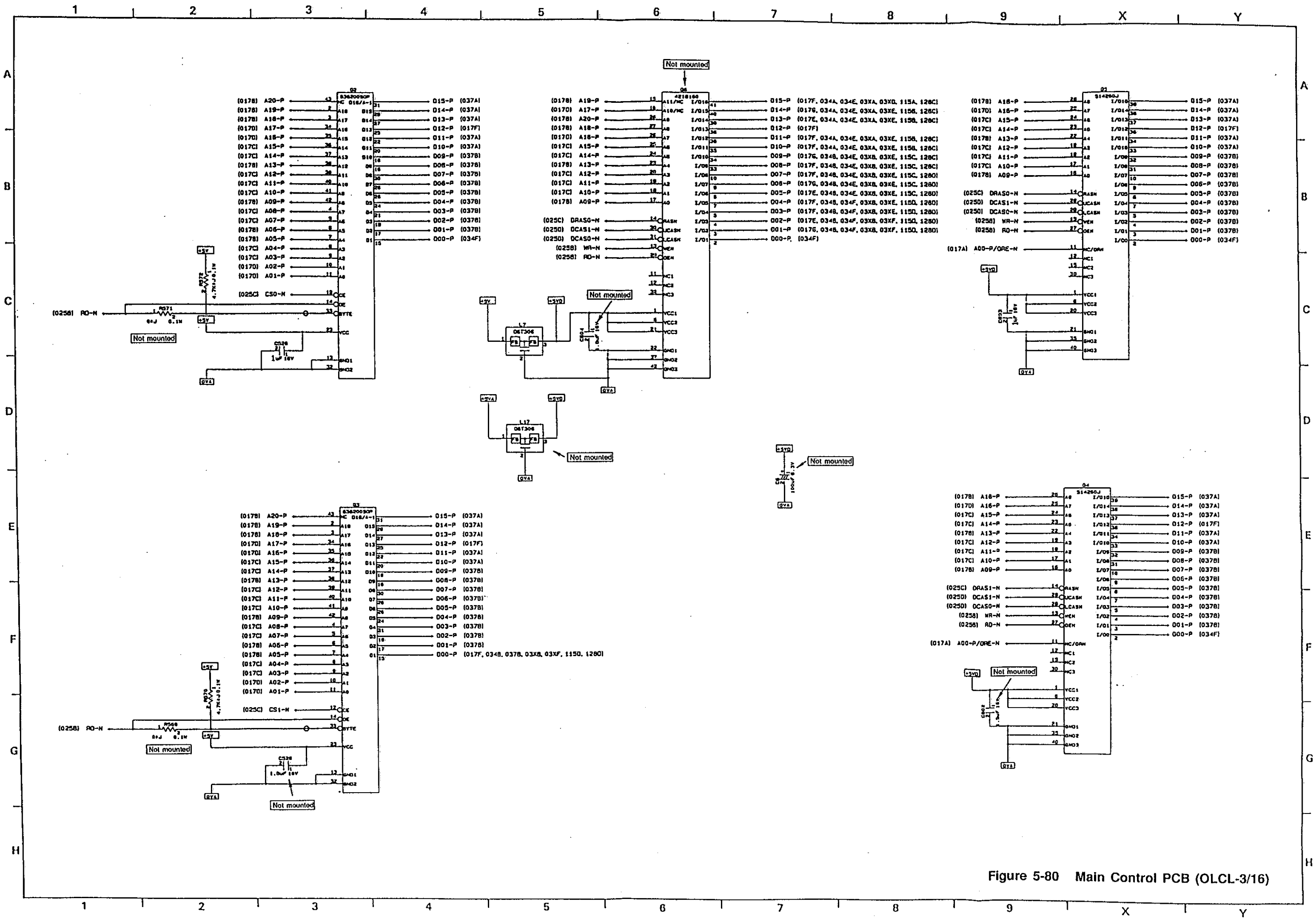


Figure 5-80 Main Control PCB (OLCL-3/16)

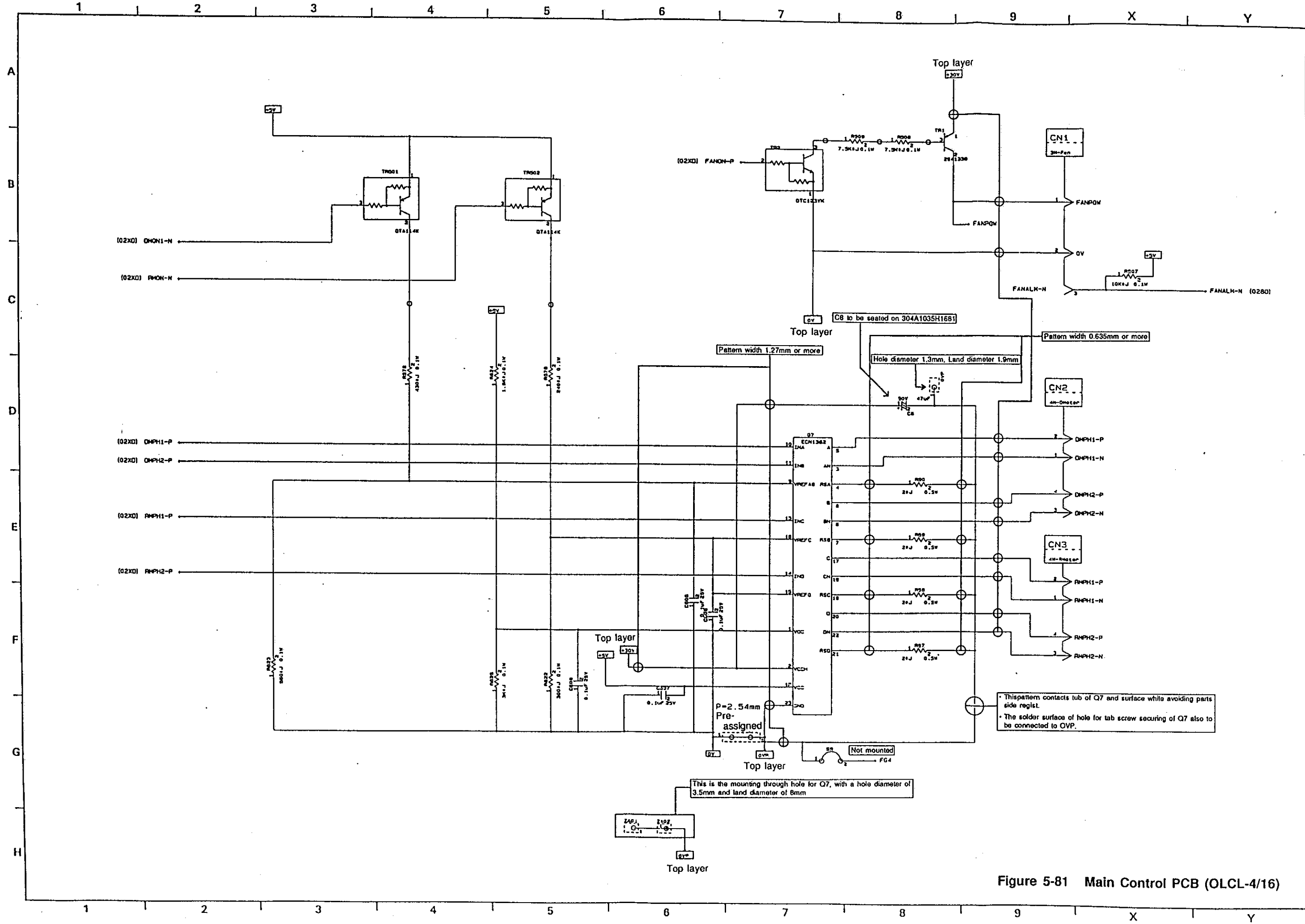


Figure 5-81 Main Control PCB (OLCL-4/16)

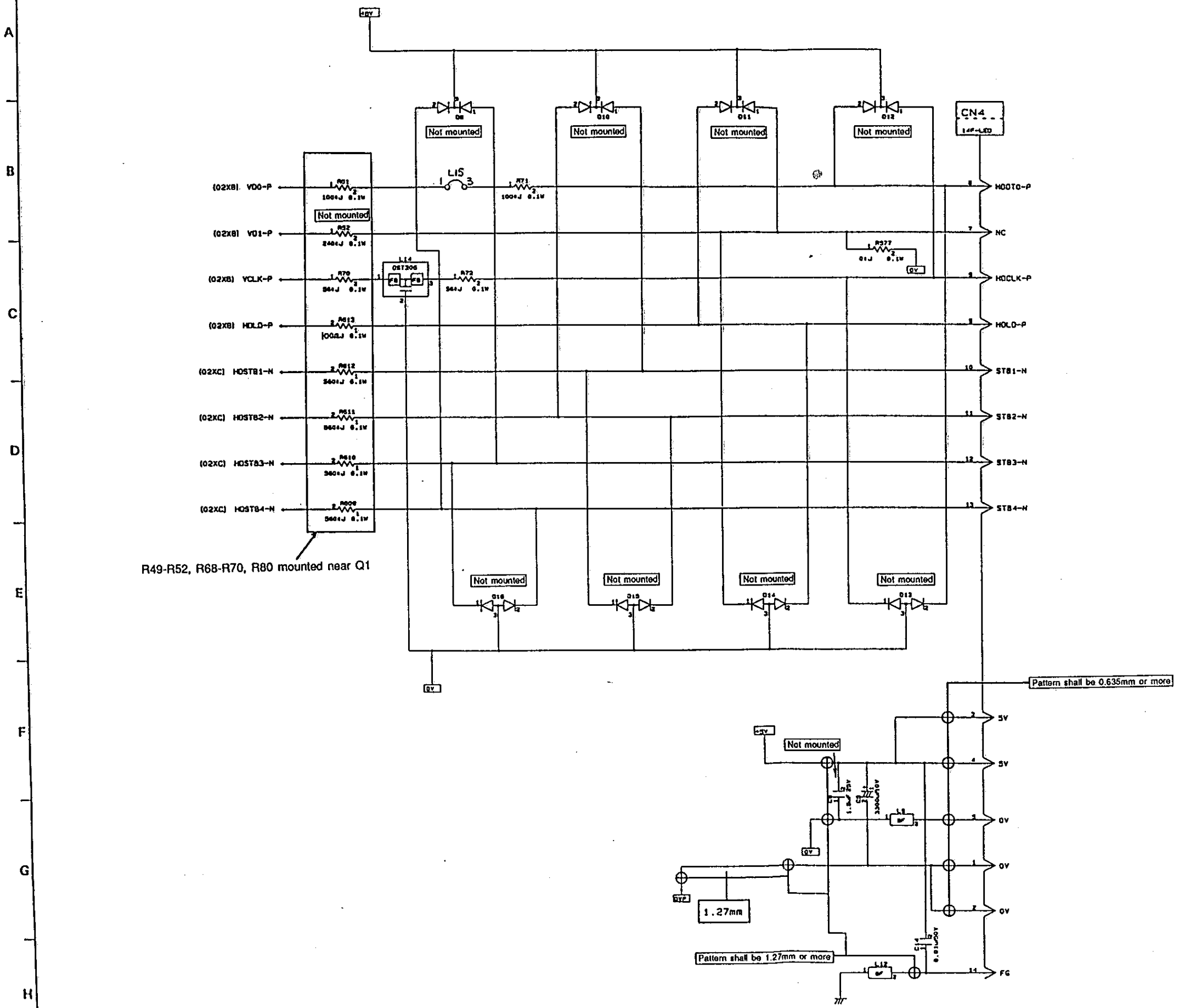


Figure 5-82 Main Control PCB (OLCL-5/16)

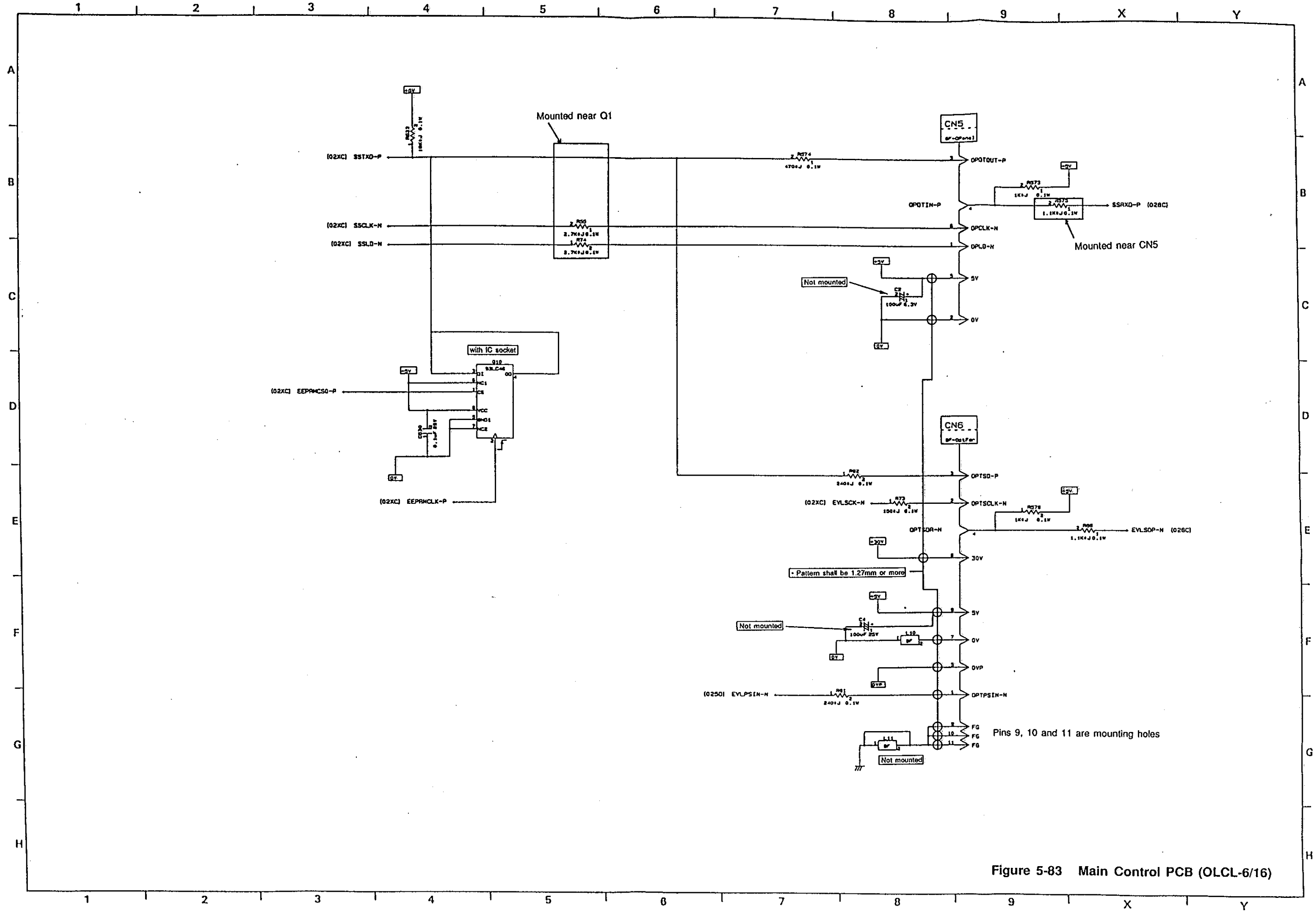


Figure 5-83 Main Control PCB (OLCL-6/16)

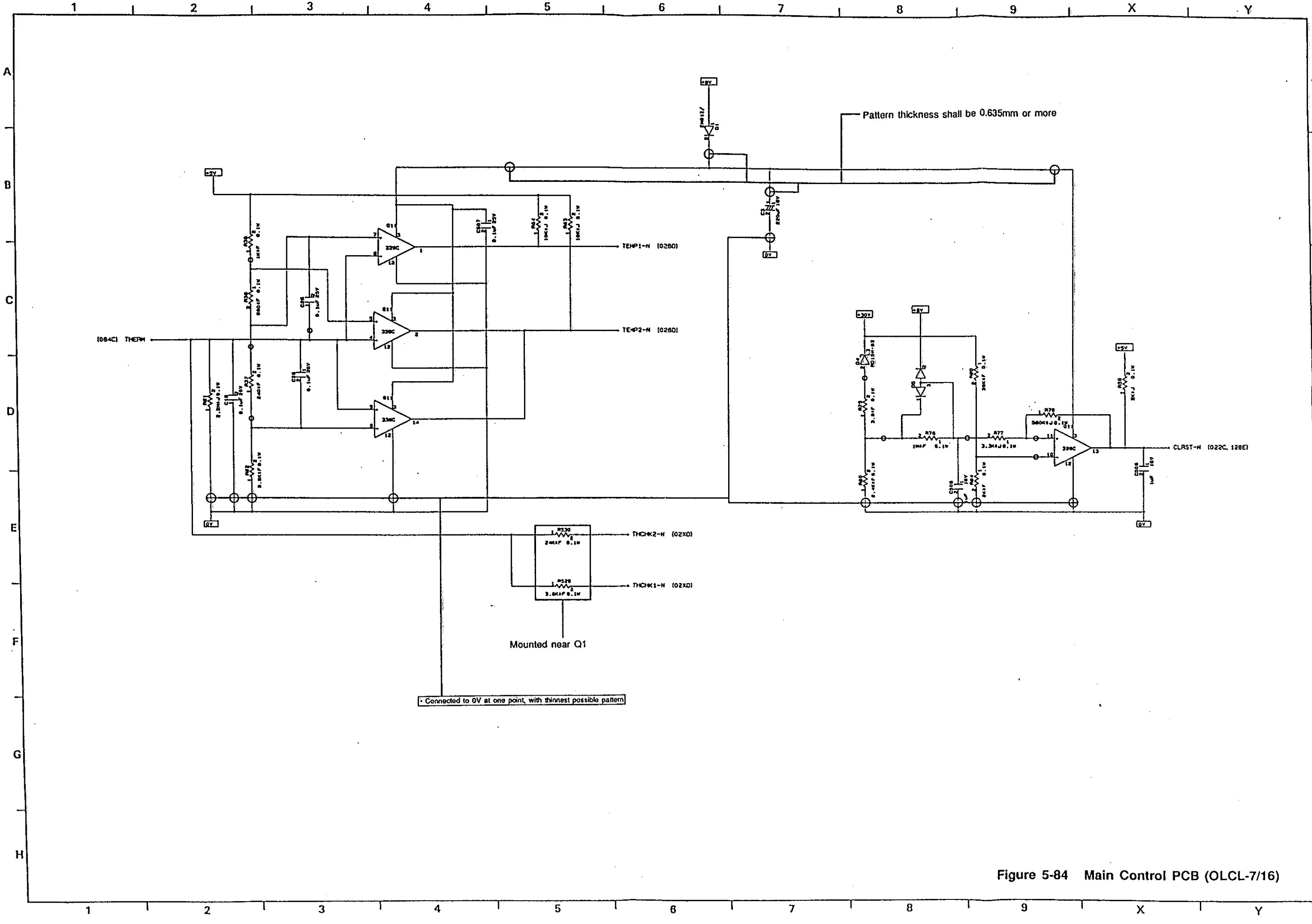


Figure 5-84 Main Control PCB (OLCL-7/16)

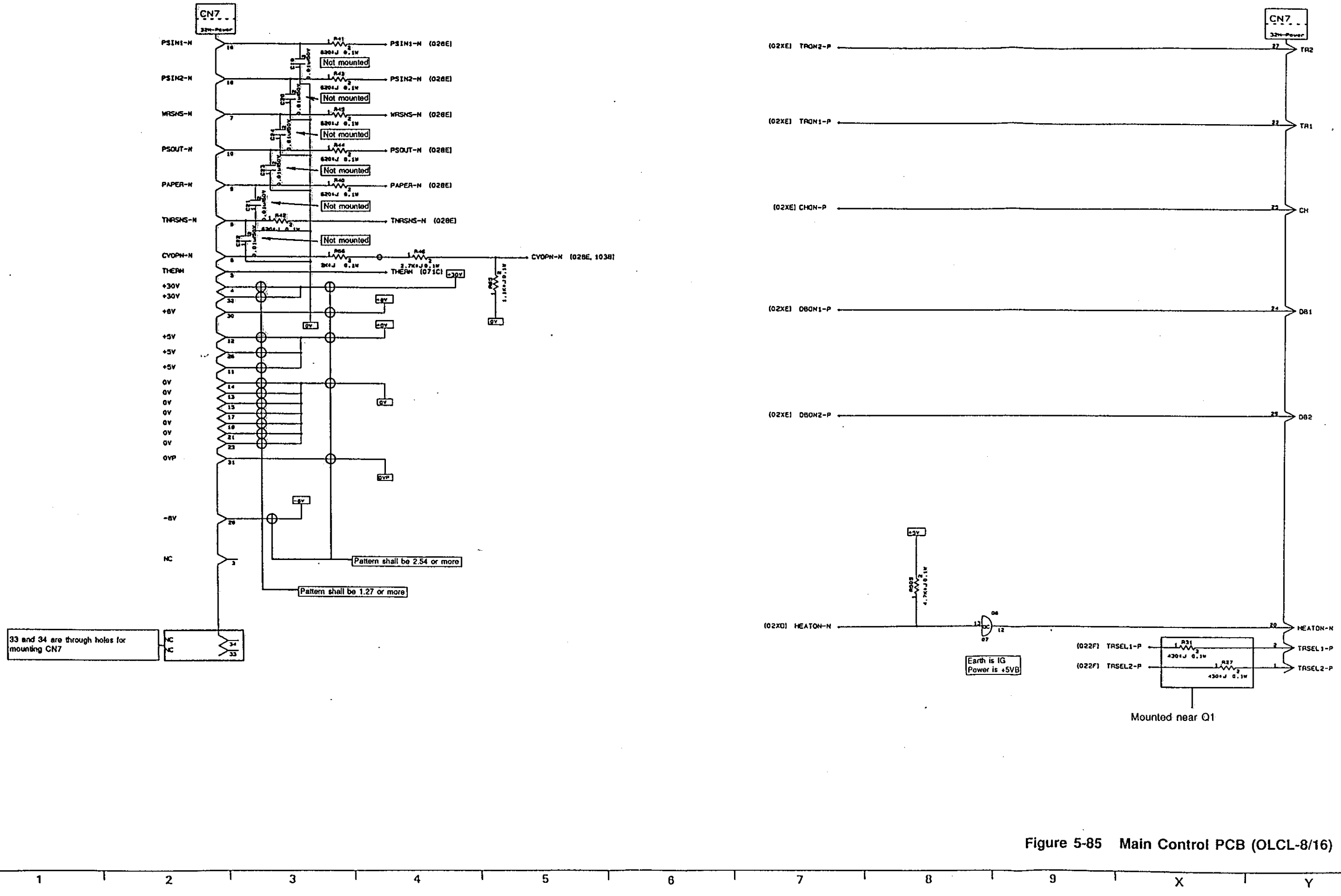
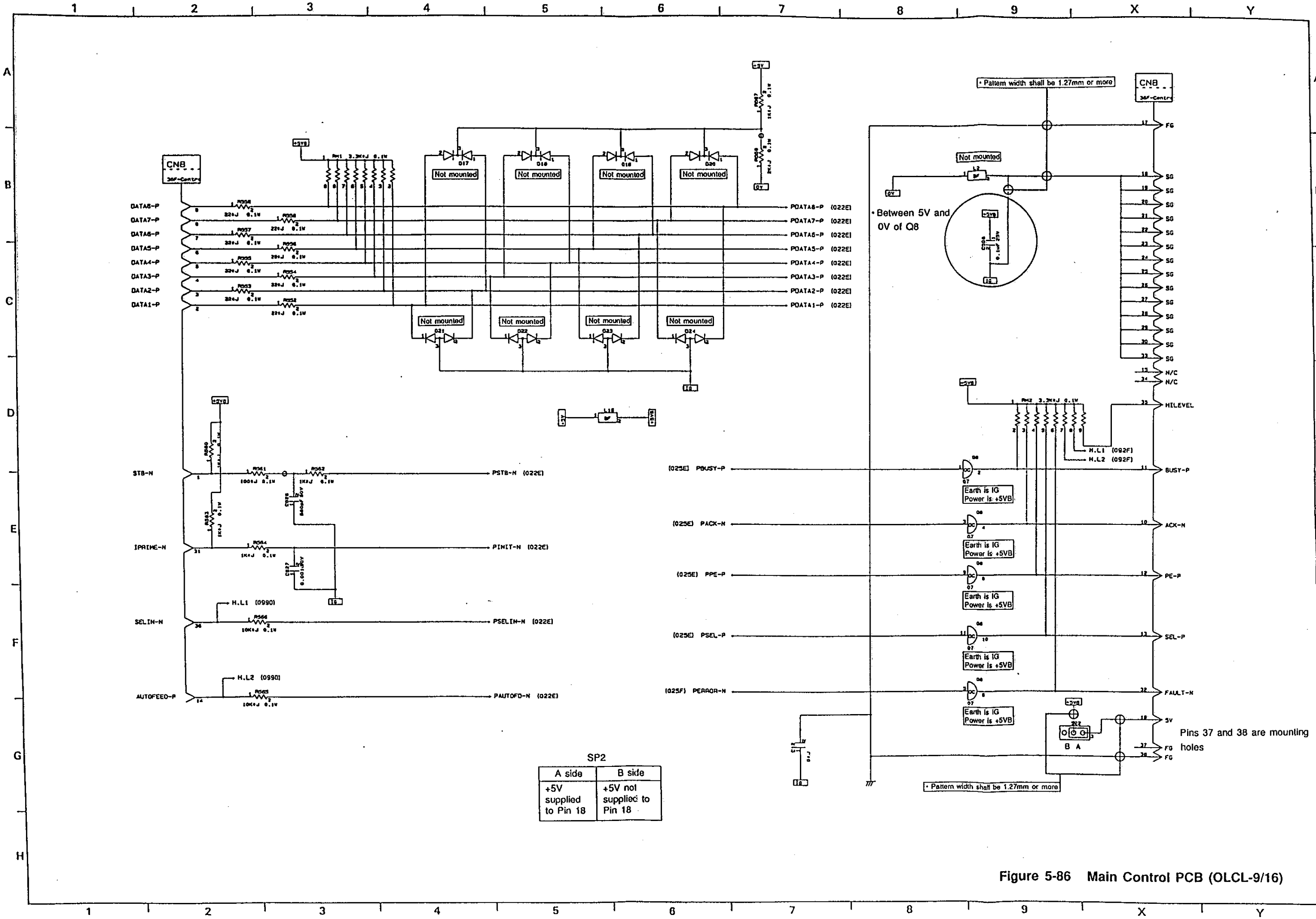


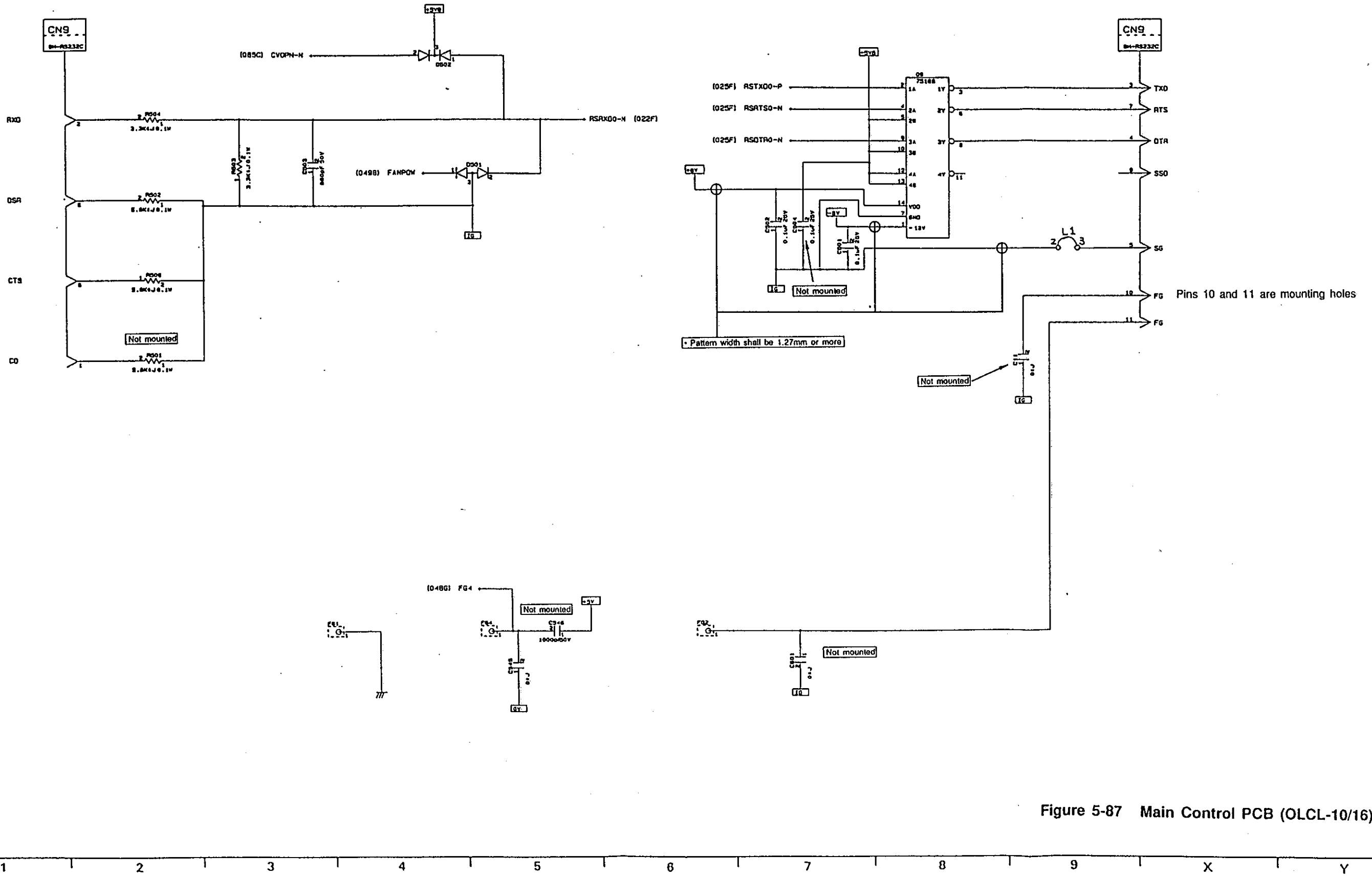
Figure 5-85 Main Control PCB (OLCL-8/16)



SP2

A side	B side
+5V supplied to Pin 18	+5V not supplied to Pin 18

Figure 5-86 Main Control PCB (OLCL-9/16)



Pins 10 and 11 are mounting holes

Figure 5-87 Main Control PCB (OLCL-10/16)

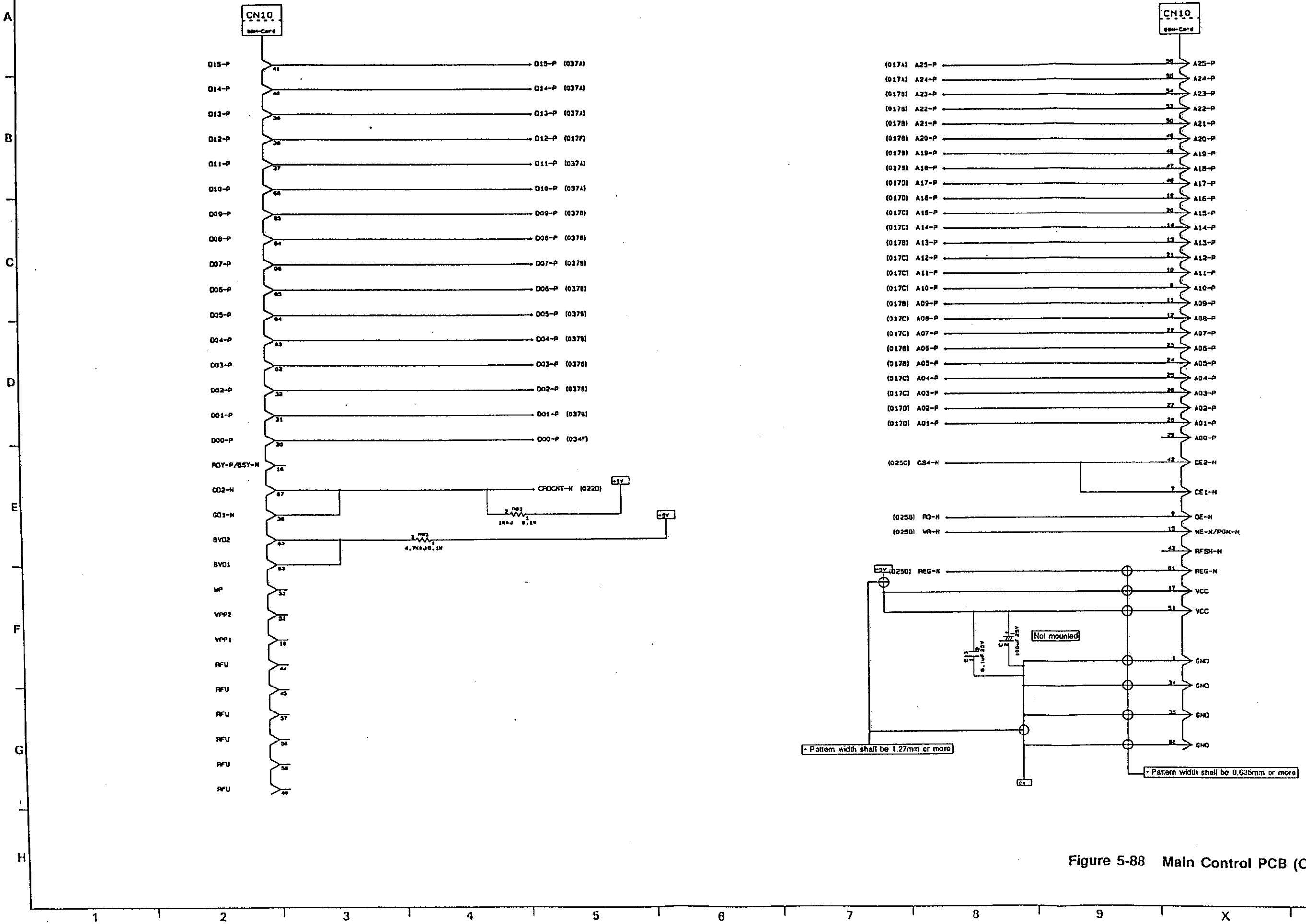


Figure 5-88 Main Control PCB (OLCL-11/16)

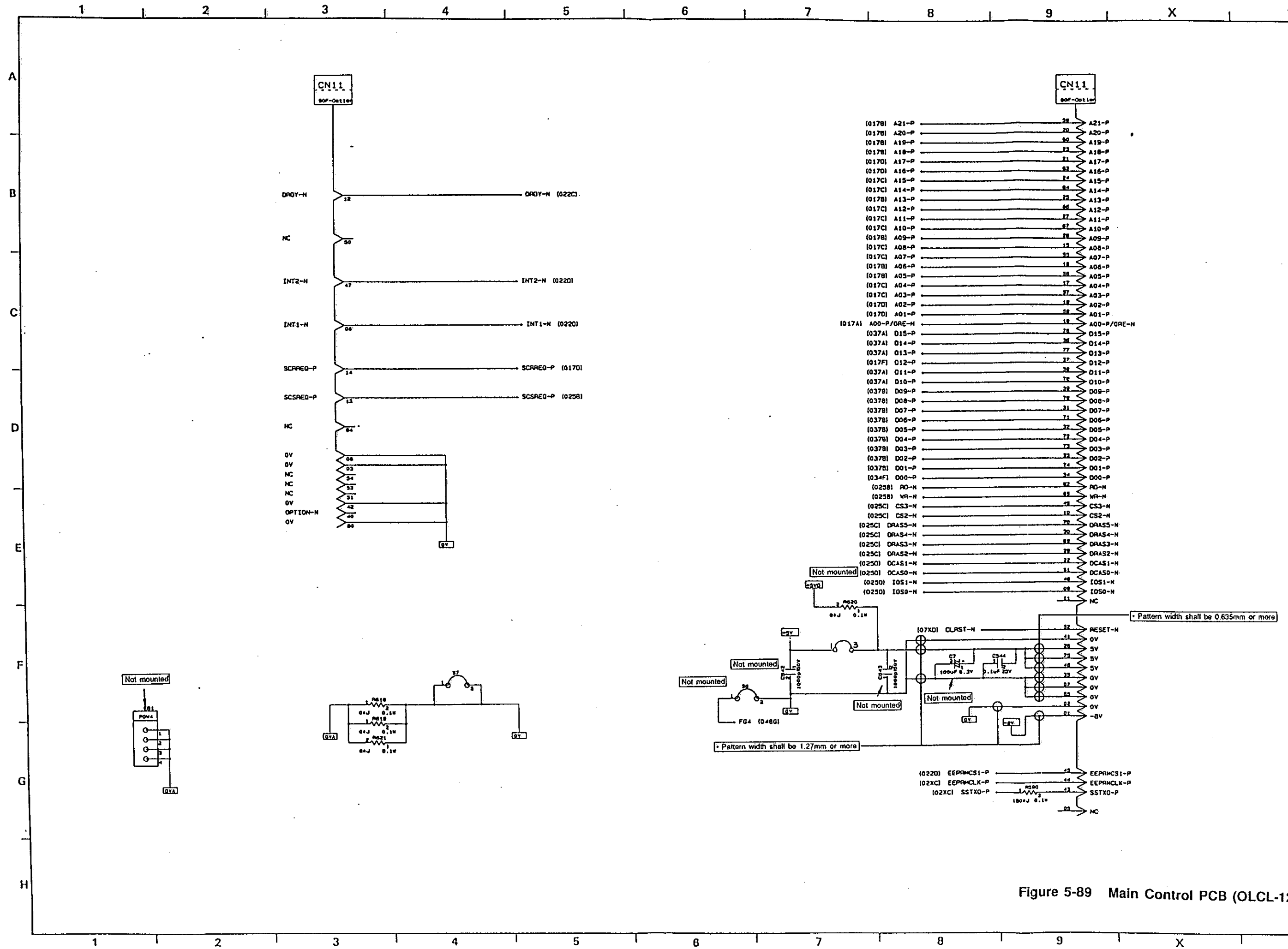


Figure 5-89 Main Control PCB (OLCL-12/16)

Connector Name: 14F-LED
Part Number: 224A3590P0140
Part Symbol: CN4

Pin No.	Signal Name	Location	
1	0V	057G	
2	0V	057G	
3	5V	057F	
4	5V	057F	
5	0V	057G	
6	HODTO-P	057B	
7	NC	057B	
8	HOCLK-P	057C	
9	HOLD-P	057C	
10	STB1-N	057C	
11	STB2-N	057D	
12	STB3-N	057D	
13	STB4-N	057D	
14	FG	057H	

Connector Name: 32M-Power
Part Number: 224A3368P0320
Part Symbol: CN7

Pin No.	Signal Name	Location	
1	TASEL2-P	08YG	
2	TASEL1-P	08YF	
3	NC	082F	
4	+30V	082D	
5	THERM	082C	
6	CVOPN-N	082C	
7	WASNS-N	082B	
8	TNASNS-N	082C	
9	PAPER-N	082C	
10	PSOUT-N	082B	
11	+5V	082D	
12	+5V	082D	
13	0V	082D	
14	0V	082D	
15	0V	082D	
16	PSIN1-N	082B	
17	0V	082E	
18	PSIN2-N	082B	
19	0V	082E	
20	HEATON-N	08YF	
21	0V	082E	
22	TR1	08YB	
23	0V	082E	
24	DB1	08YD	
25	CH	08YC	
26	+5V	082D	
27	TR2	08YB	
28	-8V	082E	
29	DB2	08YE	
30	+8V	082D	
31	0VP	082E	
32	+30V	082D	
33	NC	082F	
34	NC	082F	

Connector Name: 36F-Centro
Part Number: 220A1783P0362
Part Symbol: CN8

Pin No.	Signal Name	Location	
1	STB-N	092D	
2	DATA1-P	092C	
3	DATA2-P	092C	
4	DATA3-P	092C	
5	DATA4-P	092C	
6	DATA5-P	092C	
7	DATA6-P	092B	
8	DATA7-P	092B	
9	DATA8-P	092B	
10	ACK-N	09XE	
11	BUSY-P	09XD	
12	PE-P	09XE	
13	SEL-P	09XF	
14	AUTOFEED-P	092F	
15	N/C	09XD	
16	SG	09XB	
17	FG	09XA	
18	5V	09XG	
19	SG	09XB	
20	SG	09XB	
21	SG	09XB	
22	SG	09XB	
23	SG	09XC	
24	SG	09XC	
25	SG	09XC	
26	SG	09XC	
27	SG	09XC	
28	SG	09XC	
29	SG	09XC	
30	SG	09XC	
31	IPRIME-N	092E	
32	FAULT-N	09XF	
33	SG	09XC	
34	N/C	09XD	
35	HILEVEL	09XD	
36	SELIN-N	092F	
37	FG	09XG	
38	FG	09XG	

Connector Name: 3M-Fan
Part Number: 224A3528P0030
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	FANPOW	049B	
2	0V	049B	
3	FANALM-N	04XC	

Figure 5-90 Main Control PCB (OLCL-13/16)

Connector Name: 4M-DMotor
Part Number: 224A3357P0040
Part Symbol: CN2

Pin No.	Signal Name	Location	
1	DMPH1-N	0490	
2	DMPH1-P	0490	
3	DMPH2-N	049E	
4	DMPH2-P	0490	

Connector Name: 4M-RMotor
Part Number: 224A3357P0040
Part Symbol: CN3

Pin No.	Signal Name	Location	
1	RMPH1-N	049E	
2	RMPH1-P	049E	
3	RMPH2-N	049F	
4	RMPH2-P	049F	

Connector Name: 68M-Card
Part Number: 224A0121O0680
Part Symbol: CN10

Pin No.	Signal Name	Location	
1	GND	11XF	
02	D03-P	113D	
03	D04-P	113D	
04	D05-P	113C	
05	D06-P	113C	
06	D07-P	113C	
7	CE1-N	11XE	
8	A10-P	11XC	
9	OE-N	11XE	
10	A11-P	11XC	
11	A09-P	11XC	
12	A08-P	11XC	
13	A13-P	11XC	
14	A14-P	11XC	
15	WE-N/PGM-N	11XE	
16	RDY-P/BSY-N	113E	
17	VCC	11XF	
18	VPP1	113F	
19	A16-P	11XC	
20	A15-P	11XC	
21	A12-P	11XC	
22	A07-P	11XD	
23	A06-P	11XD	
24	A05-P	11XD	
25	A04-P	11XD	
26	A03-P	11XD	
27	A02-P	11XD	
28	A01-P	11XD	
29	A00-P	11XD	
30	D00-P	113D	
31	D01-P	113D	
32	D02-P	113D	
33	WP	113F	
34	GND	11XF	
35	GND	11XG	
36	CD1-N	113E	
37	D11-P	113B	
38	D12-P	113B	
39	D13-P	113B	
40	D14-P	113B	
41	D15-P	113A	
42	CE2-N	11XE	
43	RFSH-N	11XE	
44	RFU	113F	
45	RFU	113F	
46	A17-P	11XB	
47	A18-P	11XB	
48	A19-P	11XB	
49	A20-P	11XB	
50	A21-P	11XB	

Pin No.	Signal Name	Location	
51	VCC	11XF	
52	VPP2	113F	
53	A22-P	11XB	
54	A23-P	11XB	
55	A24-P	11XB	
56	A25-P	11XA	
57	RFU	113G	
58	RFU	113G	
59	RFU	113G	
60	RFU	113G	
61	REG-N	11XF	
62	BVD2	113E	
63	BVD1	113E	
64	D08-P	113C	
65	D09-P	113C	
66	D10-P	113B	
67	CD2-N	113E	
68	GND	11XG	

Figure 5-91 Main Control PCB (OLCL-14/16)

Connector Name: 6F-OPanel
Part Number: 224A3590P0060
Part Symbol: CN5

Pin No.	Signal Name	Location	
1	OPLD-N	068B	
2	0V	068C	
3	OPOTOUT-P	068B	
4	OPOTIN-P	069B	
5	5V	068C	
6	OPCLK-N	068B	

Connector Name: 60F-Option
Part Number: 224A3516P0800
Part Symbol: CN11

Pin No.	Signal Name	Location	
01	-8V	129F	
02	0V	129F	
03	0V	123D	
04	NC	123D	
05	NC	129G	
06	0V	123D	
07	0V	129F	
08	INT1-N	123C	
09	IOS0-N	129E	
10	CS2-N	129D	
11	NC	129E	
12	DROY-N	123B	
13	SCSREQ-P	123C	
14	SCRREQ-P	123C	
15	A08-P	129B	
16	A06-P	129B	
17	A04-P	129C	
18	A02-P	129C	
19	A00-P/ORE-N	129C	
20	A20-P	129A	
21	A17-P	129A	
22	DCAS1-N	129E	
23	A18-P	129A	
24	A15-P	129B	
25	A13-P	129B	
26	5V	129F	
27	A11-P	129B	
28	A09-P	129B	
29	DRAS2-N	129E	
30	DRAS4-N	129E	
31	D07-P	129D	
32	D05-P	129D	
33	D02-P	129D	
34	D00-P	129D	
35	0V	129F	
36	D14-P	129C	
37	D12-P	129C	
38	D11-P	129C	
39	D09-P	129C	
40	OPTION-N	123D	
41	0V	129E	
42	0V	123D	
43	SSTXD-P	129G	
44	EEPRMCLK-P	129G	
45	EEPRMCS1-P	129G	
46	5V	129F	
47	INT2-N	123B	
48	IOS1-N	129E	
49	CS3-N	129D	
50	NC	123B	

Pin No.	Signal Name	Location	
51	NC	123D	
52	RESET-N	129E	
53	NC	123D	
54	NC	123D	
55	A07-P	129B	
56	A05-P	129B	
57	A03-P	129C	
58	A01-P	129C	
59	A21-P	129A	
60	A19-P	129A	
61	DCAS0-N	129E	
62	RD-N	129D	
63	A16-P	129B	
64	A14-P	129B	
65	0V	129F	
66	A12-P	129B	
67	A10-P	129B	
68	WR-N	129D	
69	DRAS3-N	129E	
70	DRAS5-N	129E	
71	D06-P	129D	
72	D04-P	129D	
73	D03-P	129D	
74	D01-P	129D	
75	5V	129F	
76	D15-P	129C	
77	D13-P	129C	
78	D10-P	129C	
79	D08-P	129C	
80	0V	123D	

Connector Name: 8F-OptFdr
Part Number: 221A1530P0081
Part Symbol: CN6

Pin No.	Signal Name	Location	
1	OPTPSIN-N	068F	
2	OPTSCLK-N	068E	
3	OPTSO-P	068D	
4	OPTSOR-N	069E	
5	OVP	068F	
6	30V	068E	
7	0V	068F	
8	5V	068F	
9	FG	068G	
10	FG	068G	
11	FG	068G	

Figure 5-92 Main Control PCB (OLCL-15/16)

Connector Name: 9M-RS232C
Part Number: 220A1376P0095
Part Symbol: CN9

Pin No.	Signal Name	Location	
1	CD	1020	
2	RXD	102C	
3	TXD	10XB	
4	DTR	10XC	
5	SG	10XD	
6	DSR	102C	
7	RTS	10XC	
8	CTS	1020	
9	SSD	10XC	
10	FG	10XD	
11	FG	10XD	

Figure 5-93 Main Control PCB (OLCL-16/16)

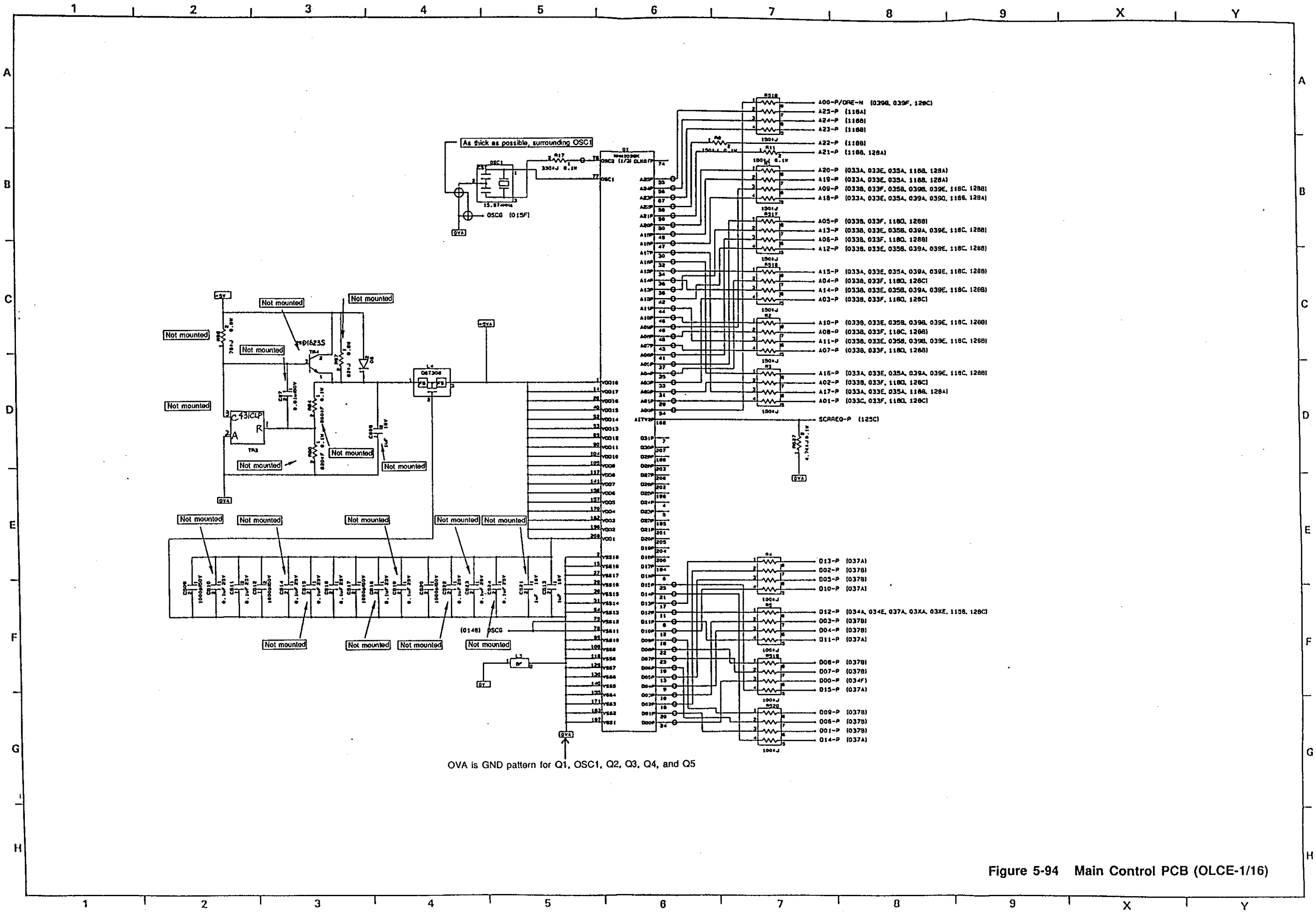


Figure 5-94 Main Control PCB (OLCE-1/16)

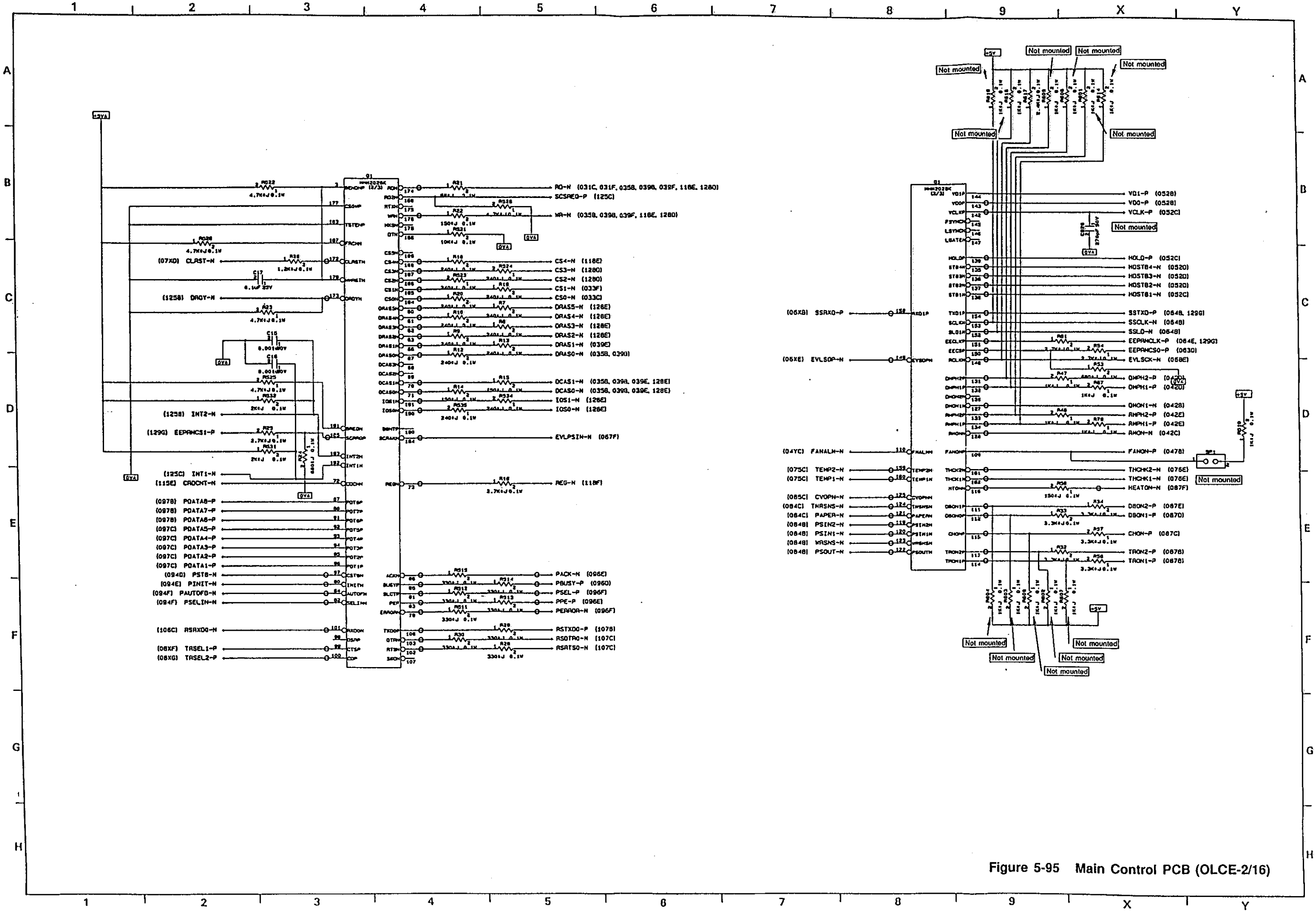


Figure 5-95 Main Control PCB (OLCE-2/16)

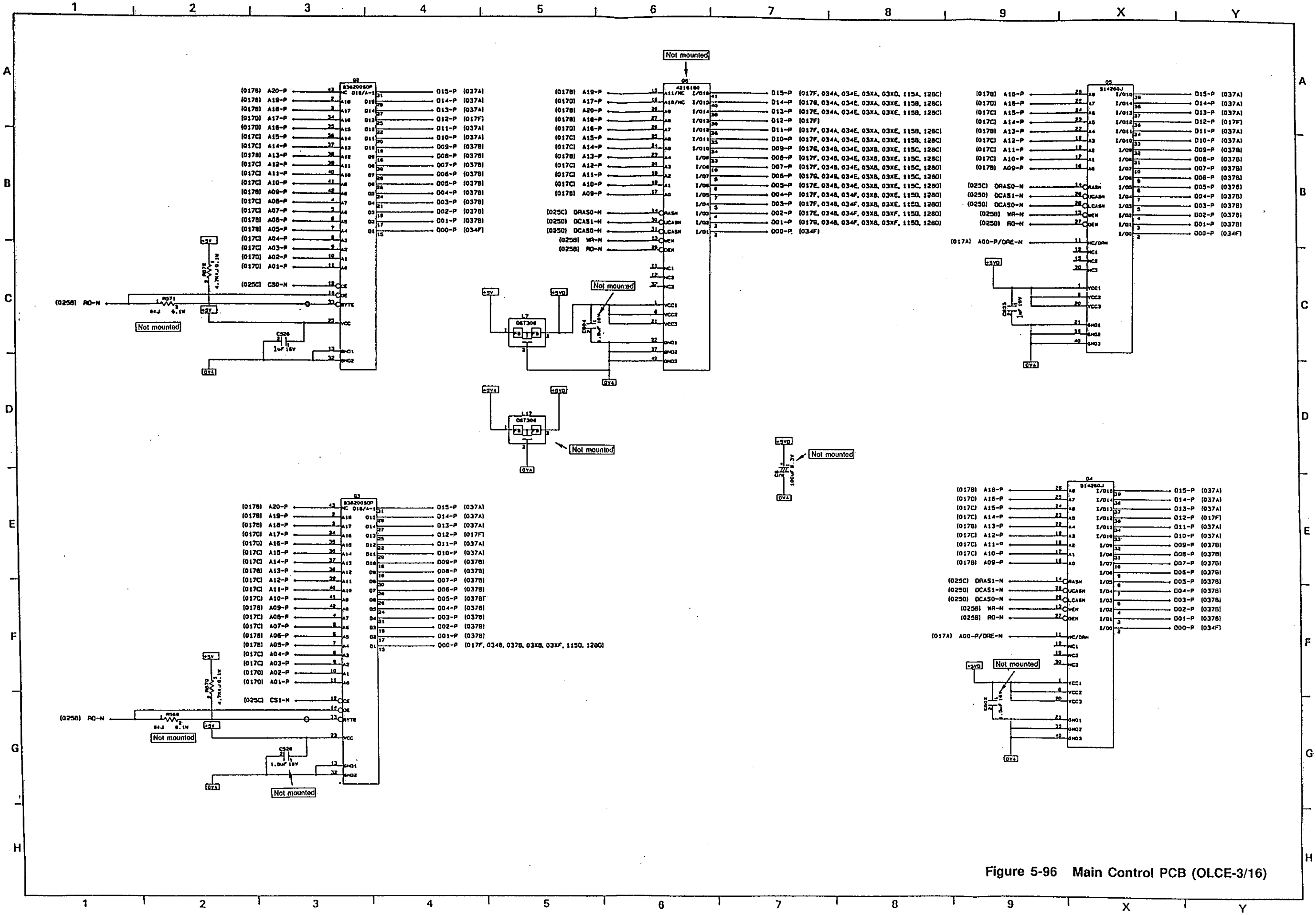


Figure 5-96 Main Control PCB (OLCE-3/16)

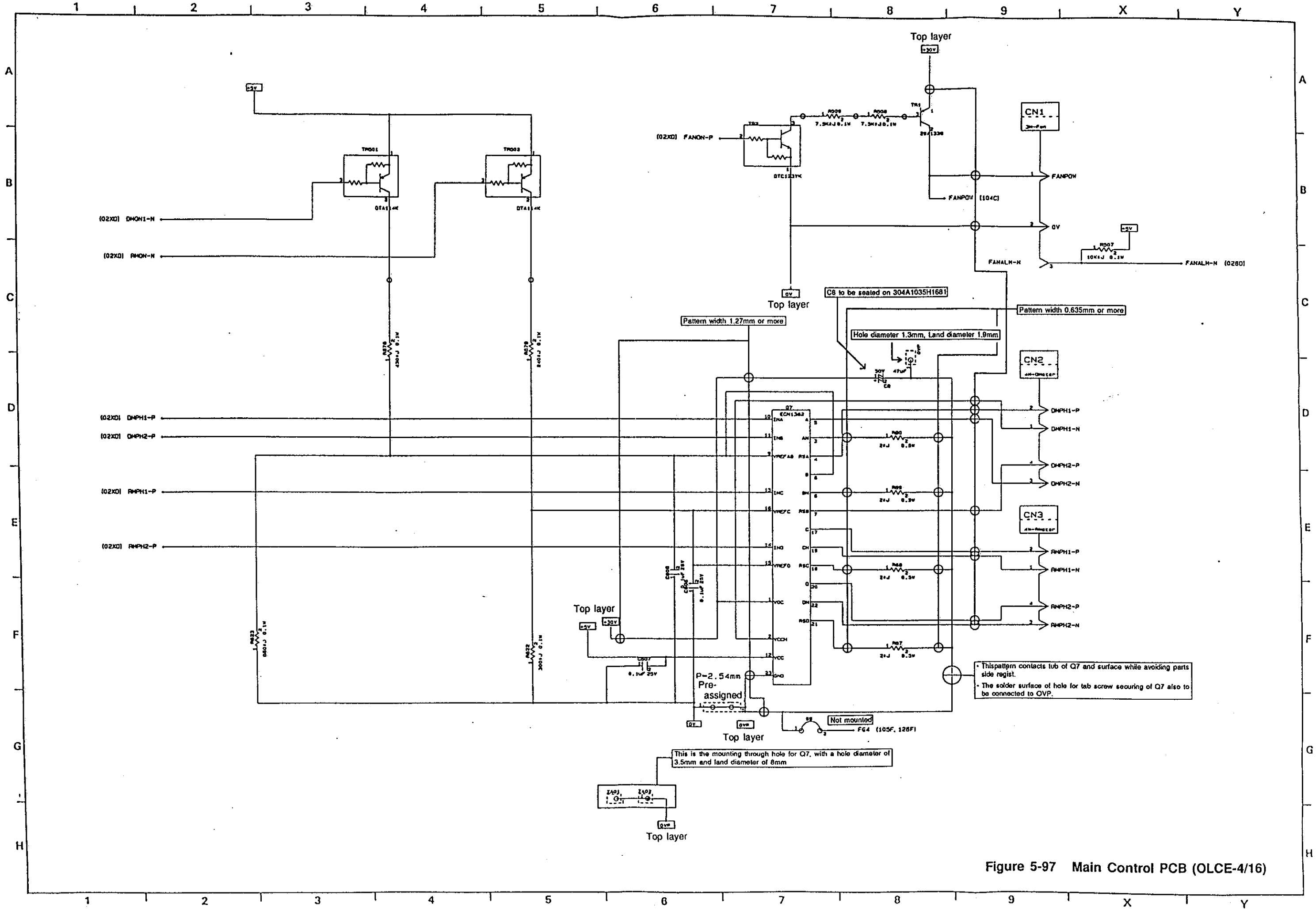


Figure 5-97 Main Control PCB (OLCE-4/16)

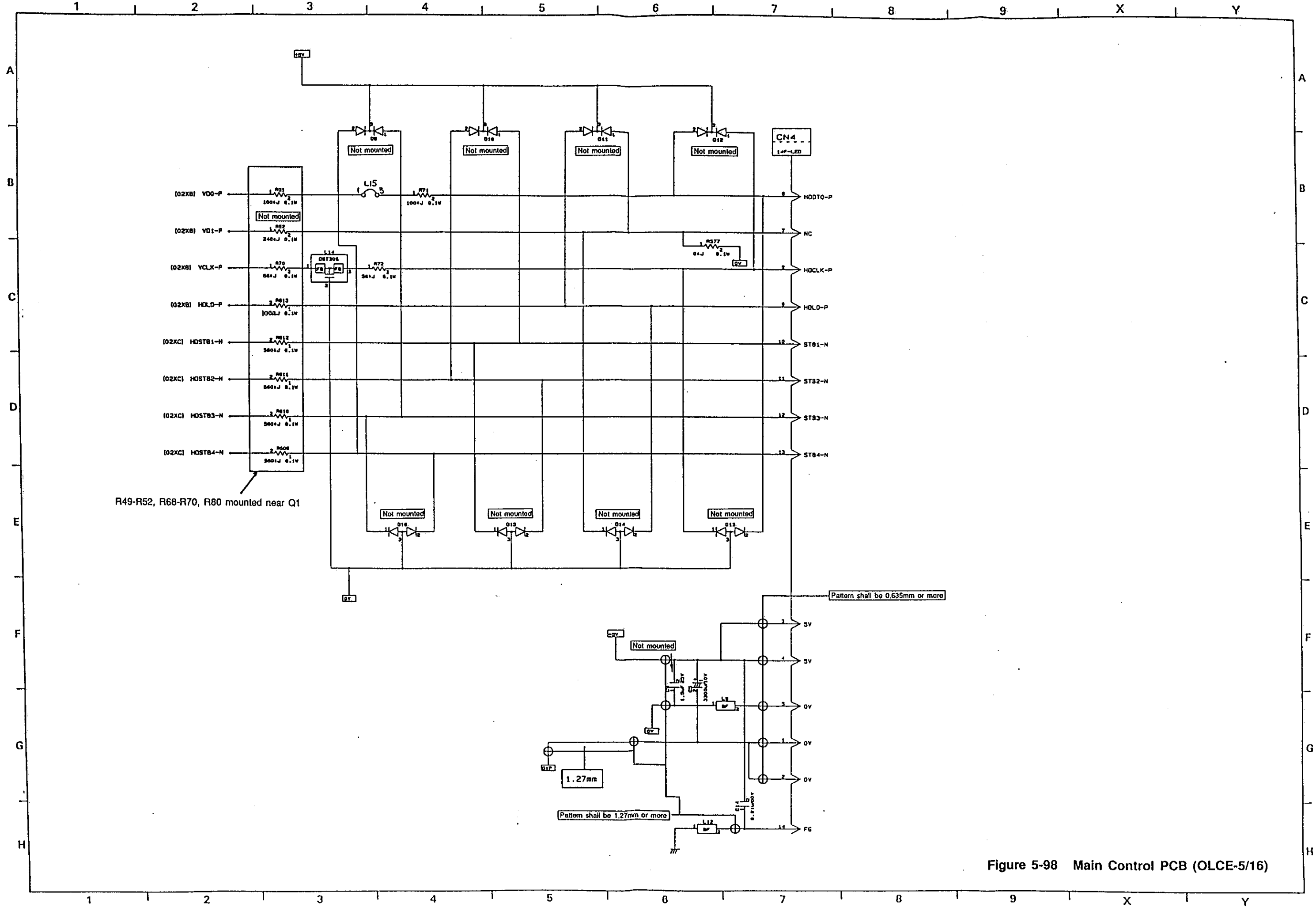


Figure 5-98 Main Control PCB (OLCE-5/16)

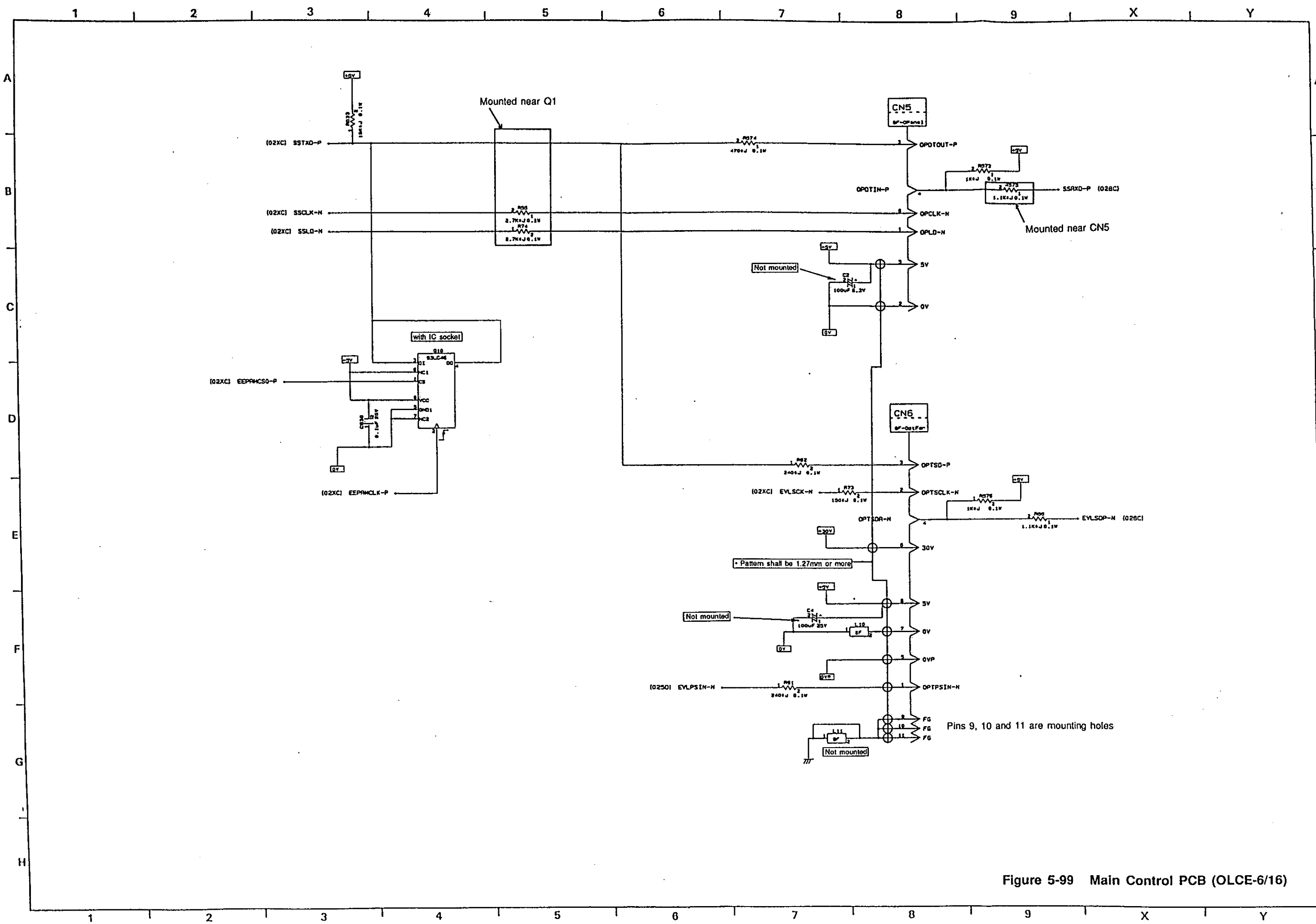


Figure 5-99 Main Control PCB (OLCE-6/16)

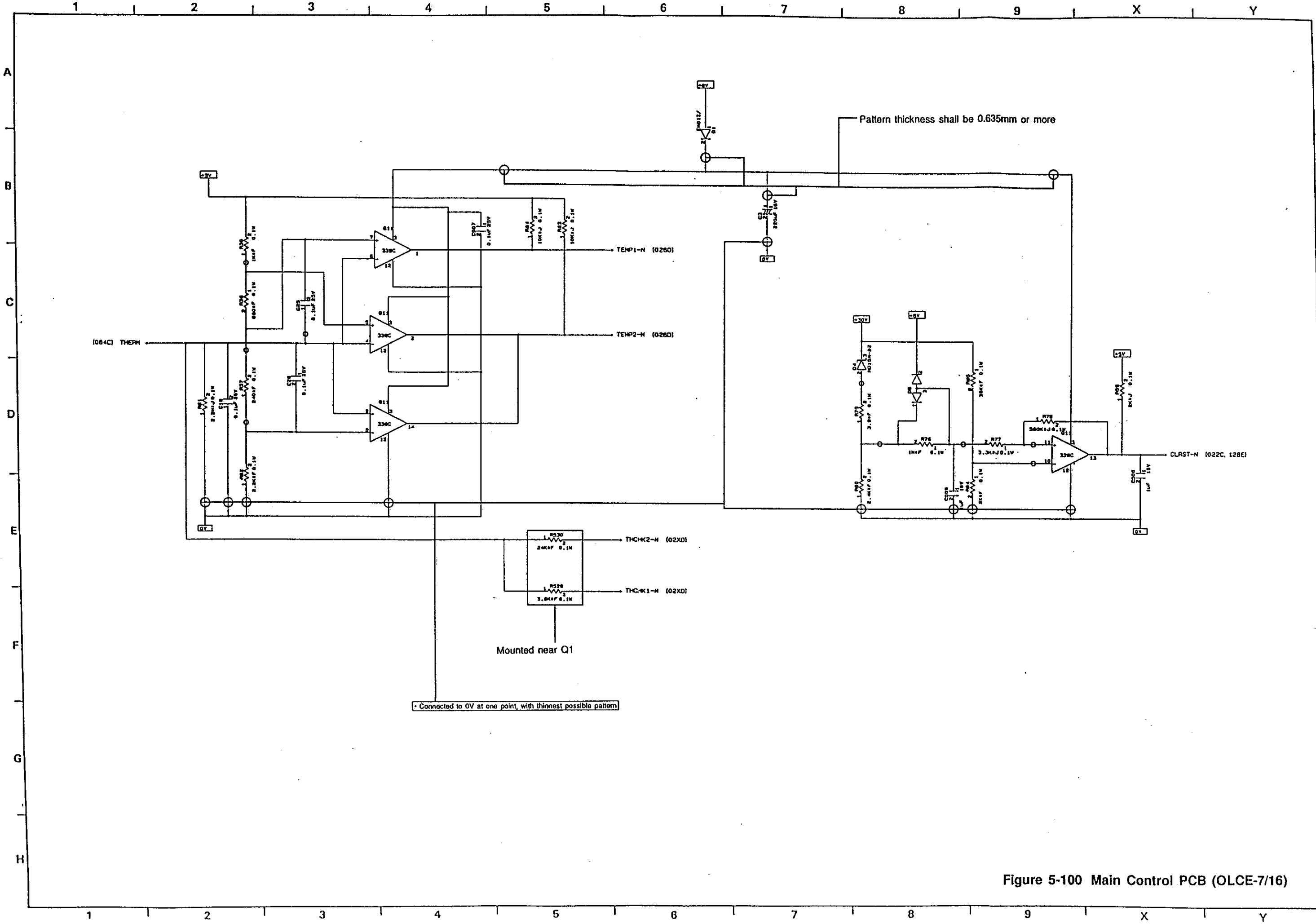


Figure 5-100 Main Control PCB (OLCE-7/16)

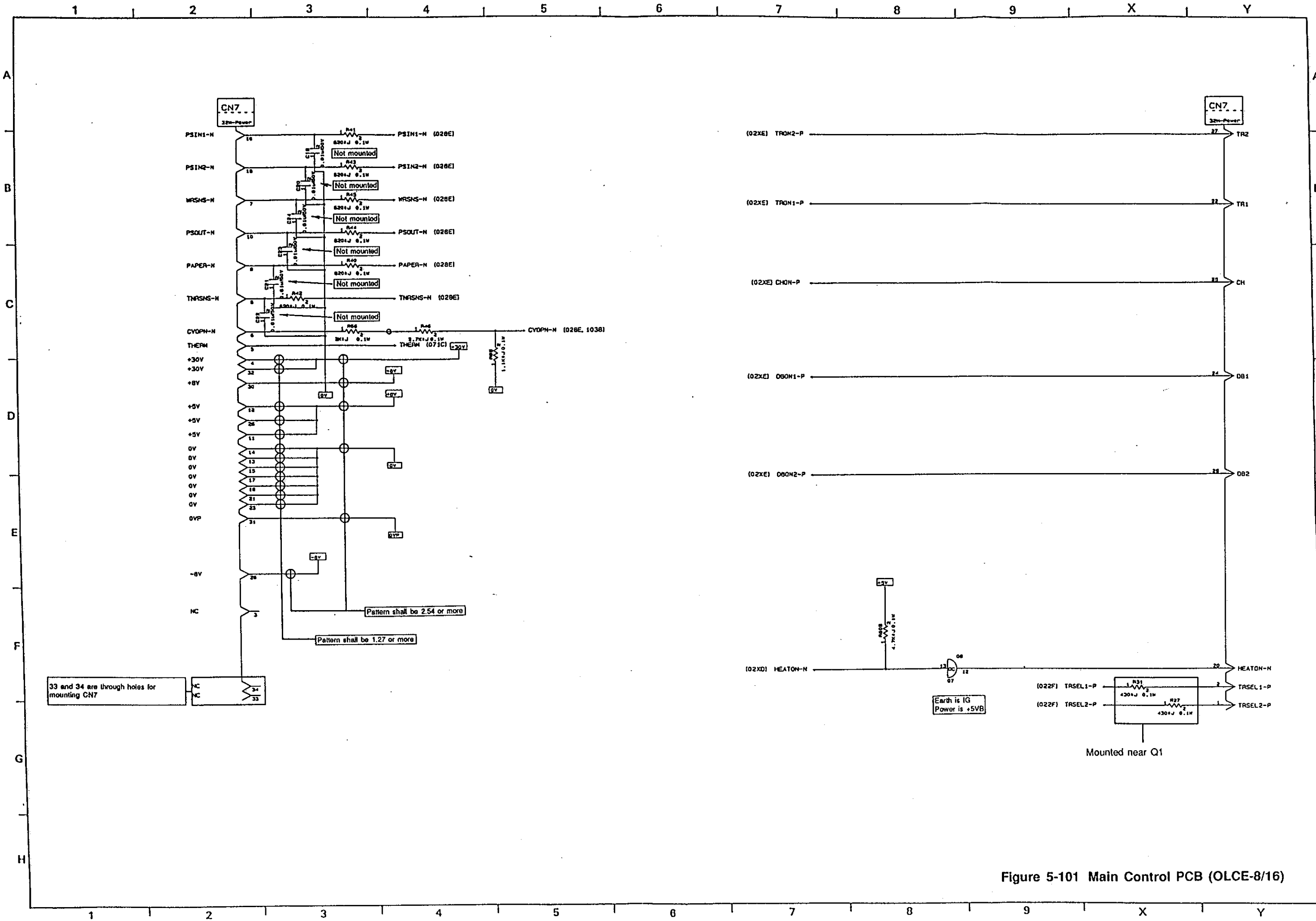
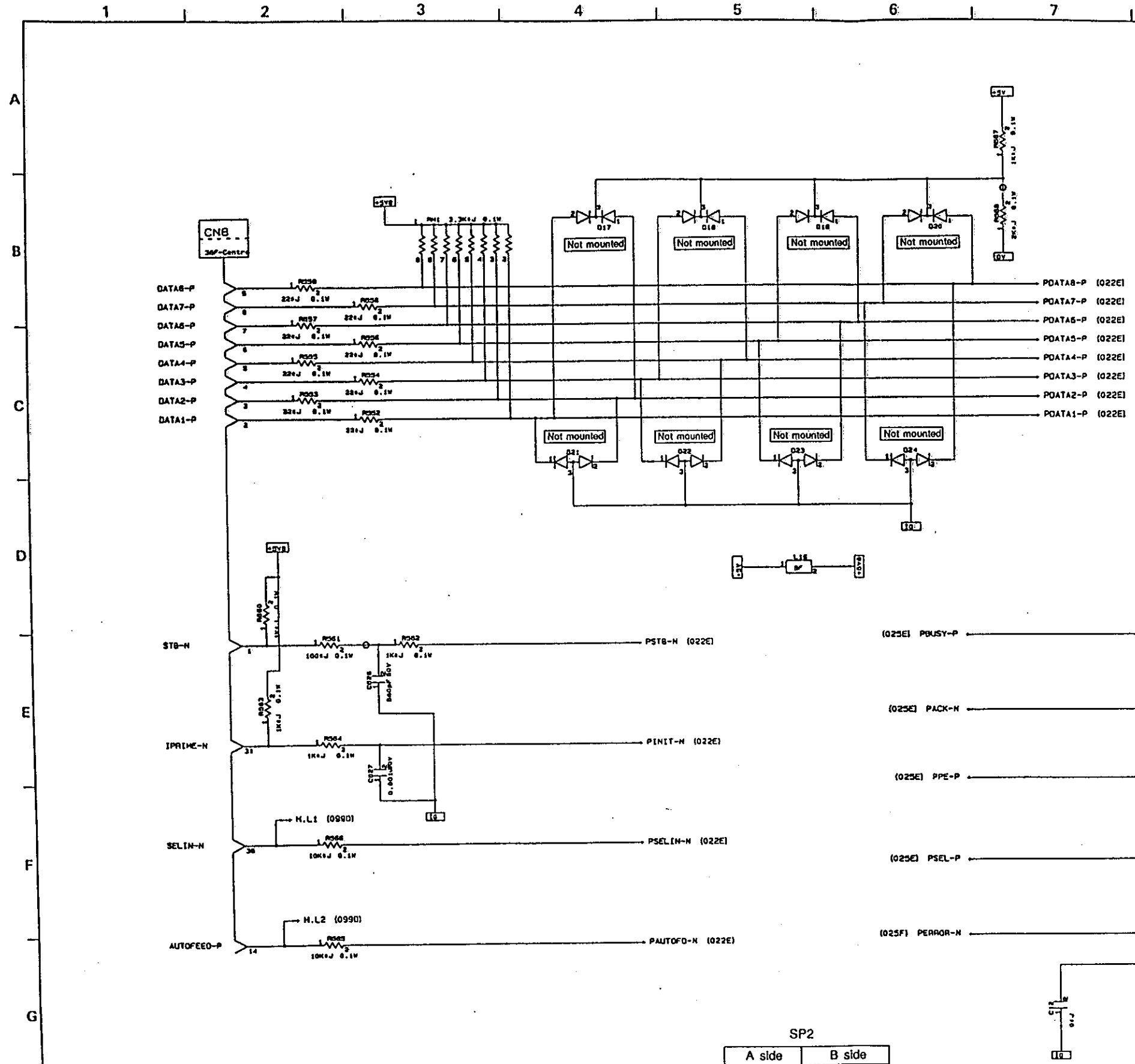
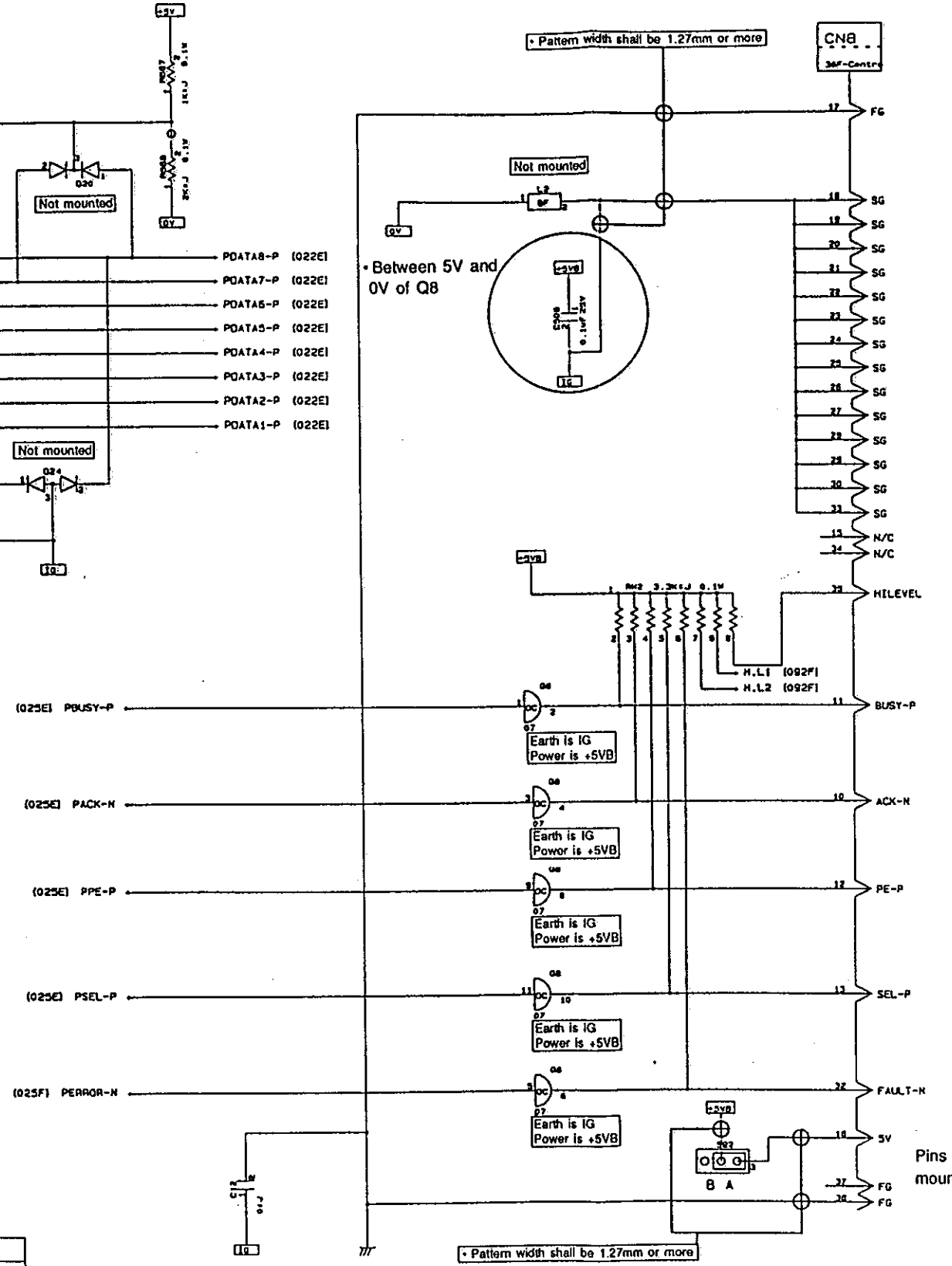


Figure 5-101 Main Control PCB (OLCE-8/16)

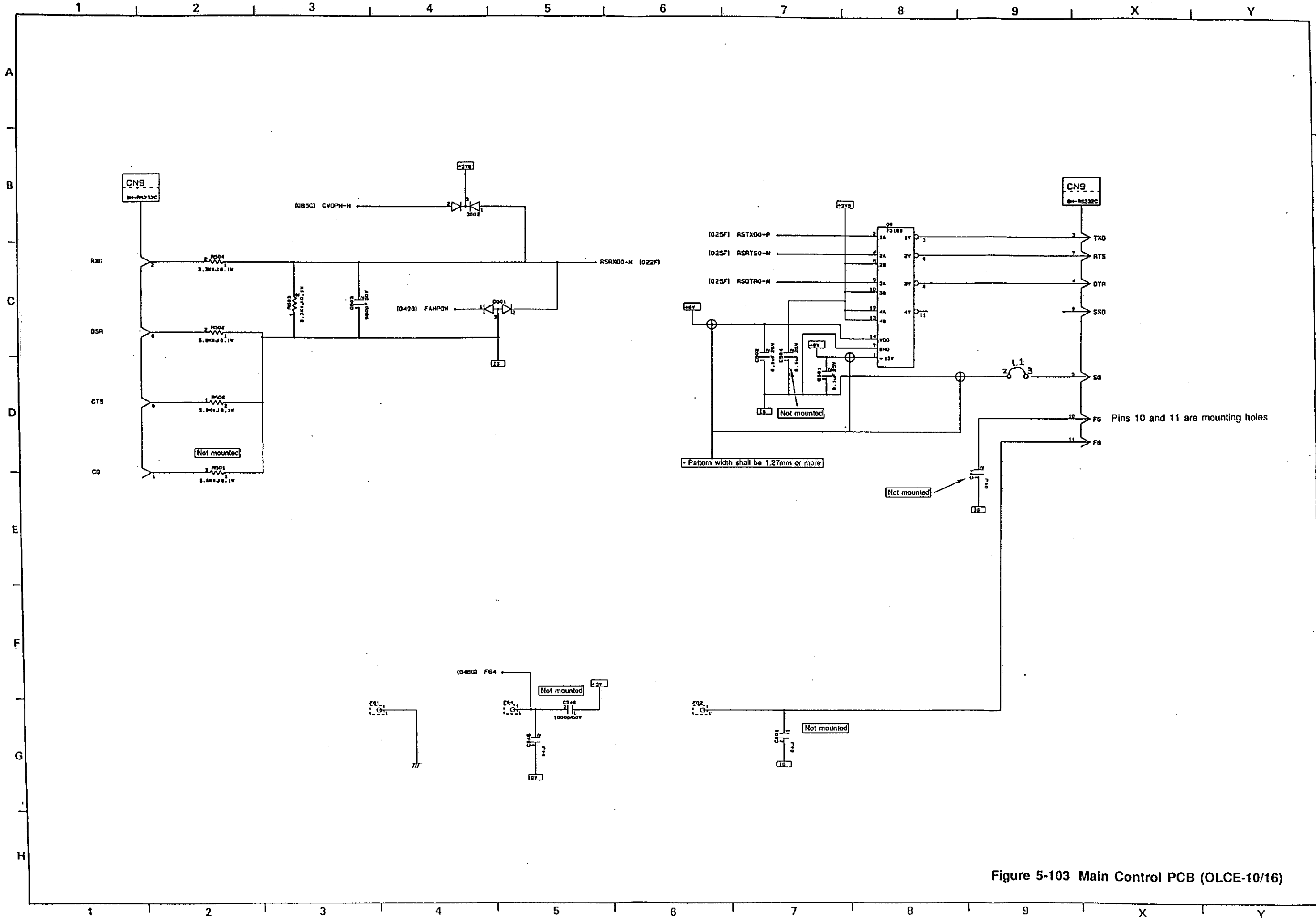




SP2

A side	B side
+5V supplied to Pin 18	+5V not supplied to Pin 18

Figure 5-102 Main Control PCB (OLCE-9/16)



Pins 10 and 11 are mounting holes

Figure 5-103 Main Control PCB (OLCE-10/16)

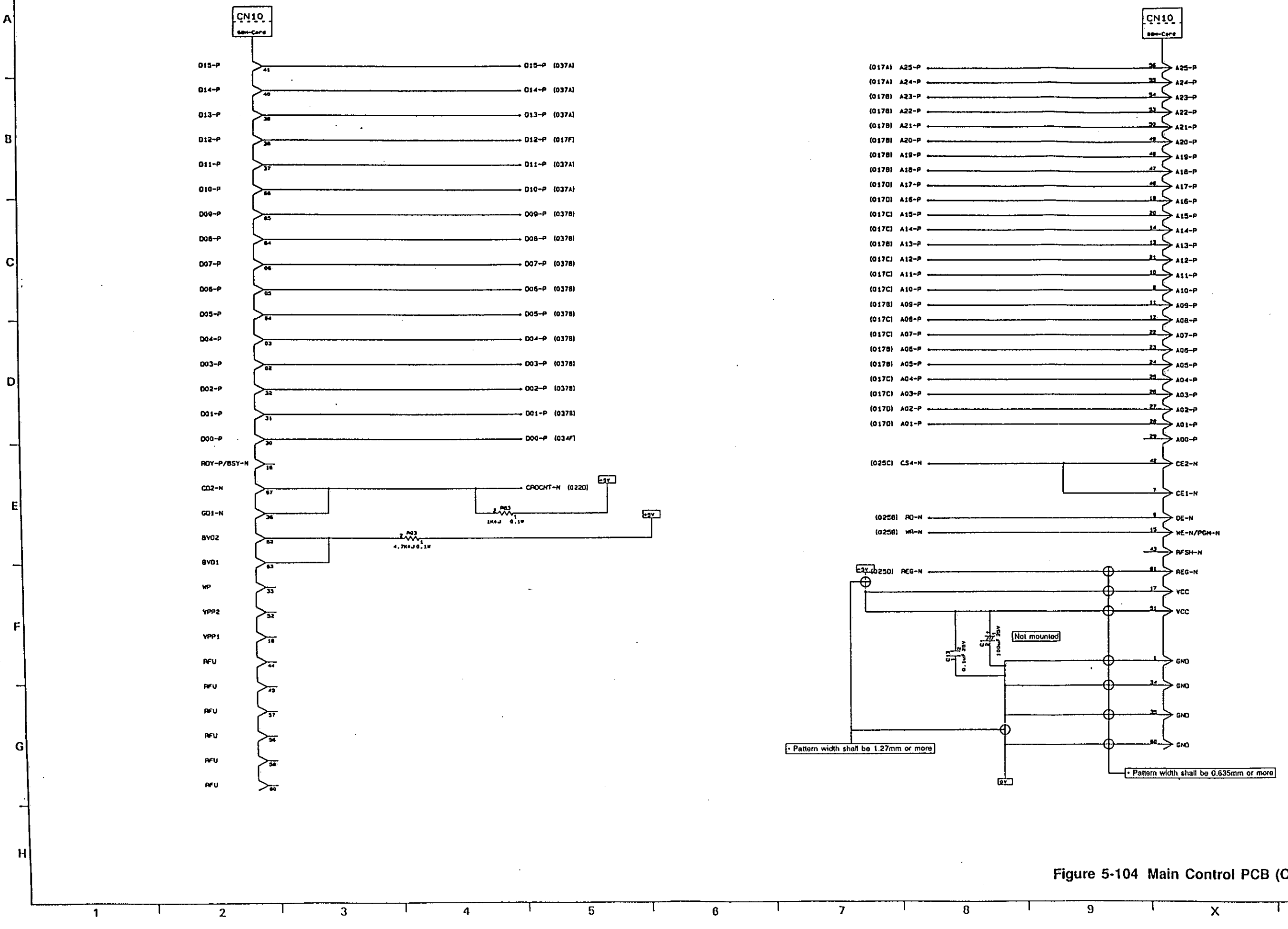


Figure 5-104 Main Control PCB (OLCE-11/16)

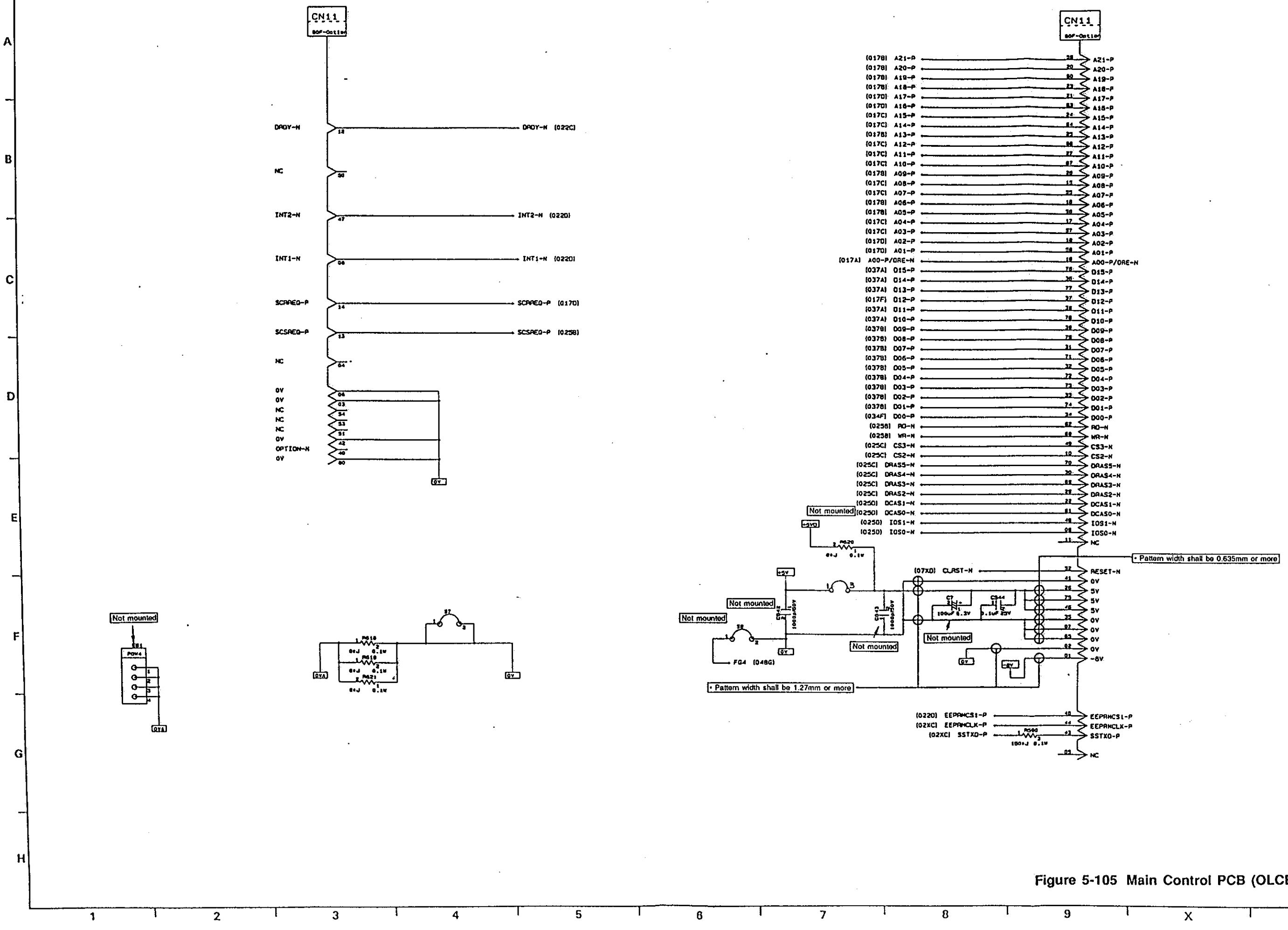


Figure 5-105 Main Control PCB (OLCE-12/16)

Connector Name: 14F-LED
Part Number: 224A3590P0140
Part Symbol: CN4

Pin No.	Signal Name	Location	
1	0V	057G	
2	0V	057G	
3	5V	057F	
4	5V	057F	
5	0V	057G	
6	HDOTO-P	057B	
7	NC	057B	
8	HDCLK-P	057C	
9	HOLD-P	057C	
10	STB1-N	057C	
11	STB2-N	057D	
12	STB3-N	057D	
13	STB4-N	057D	
14	FG	057H	

Connector Name: 32M-Power
Part Number: 224A3368P0320
Part Symbol: CN7

Pin No.	Signal Name	Location	
1	TRSEL2-P	08YG	
2	TRSEL1-P	08YF	
3	NC	082F	
4	+30V	082D	
5	THERM	082C	
6	CVOPN-N	082C	
7	WRSNS-N	082B	
8	TNRSNS-N	082C	
9	PAPER-N	082C	
10	PSOUT-N	082B	
11	+5V	082D	
12	+5V	082D	
13	0V	082D	
14	0V	082D	
15	0V	082D	
16	PSIN1-N	082B	
17	0V	082E	
18	PSIN2-N	082B	
19	0V	082E	
20	HEATON-N	08YF	
21	0V	082E	
22	TR1	08YB	
23	0V	082E	
24	DB1	08YD	
25	CH	08YC	
26	+5V	082D	
27	TR2	08YB	
28	-8V	082E	
29	DB2	08YE	
30	+8V	082D	
31	OVP	082E	
32	+30V	082D	
33	NC	082F	
34	NC	082F	

Connector Name: 36F-Centro
Part Number: 220A1783P0362
Part Symbol: CN8

Pin No.	Signal Name	Location	
1	STB-N	092D	
2	DATA1-P	092C	
3	DATA2-P	092C	
4	DATA3-P	092C	
5	DATA4-P	092C	
6	DATA5-P	092C	
7	DATA6-P	092B	
8	DATA7-P	092B	
9	DATA8-P	092B	
10	ACK-N	09XE	
11	BUSY-P	09XD	
12	PE-P	09XE	
13	SEL-P	09XF	
14	AUTOFEED-P	092F	
15	N/C	09XD	
16	SG	09XB	
17	FG	09XA	
18	5V	09XG	
19	SG	09XB	
20	SG	09XB	
21	SG	09XB	
22	SG	09XB	
23	SG	09XC	
24	SG	09XC	
25	SG	09XC	
26	SG	09XC	
27	SG	09XC	
28	SG	09XC	
29	SG	09XC	
30	SG	09XC	
31	IPRIME-N	092E	
32	FAULT-N	09XF	
33	SG	09XC	
34	N/C	09XD	
35	HILEVEL	09XD	
36	SELIN-N	092F	
37	FG	09XG	
38	FG	09XG	

Connector Name: 3M-Fan
Part Number: 224A3528P0030
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	FANPOW	0498	
2	0V	0498	
3	FANALM-N	04XC	

Figure 5-106 Main Control PCB (OLCE-13/16)

Connector Name: 4M-DMotor
Part Number: 224A3357P0040
Part Symbol: CN2

Pin No.	Signal Name	Location	
1	DMPH1-N	049D	
2	DMPH1-P	049D	
3	DMPH2-N	049E	
4	DMPH2-P	049D	

Connector Name: 4M-RMotor
Part Number: 224A3357P0040
Part Symbol: CN3

Pin No.	Signal Name	Location	
1	RMPH1-N	049E	
2	RMPH1-P	049E	
3	RMPH2-N	049F	
4	RMPH2-P	049F	

Connector Name: 68M-Card
Part Number: 224A0121O0680
Part Symbol: CN10

Pin No.	Signal Name	Location	
1	GND	11XF	
02	D03-P	113D	
03	D04-P	113D	
04	D05-P	113C	
05	D06-P	113C	
06	D07-P	113C	
7	CE1-N	11XE	
8	A10-P	11XC	
9	OE-N	11XE	
10	A11-P	11XC	
11	A09-P	11XC	
12	A08-P	11XC	
13	A13-P	11XC	
14	A14-P	11XC	
15	WE-N/PGM-N	11XE	
16	RDY-P/BSY-N	113E	
17	VCC	11XF	
18	VPP1	113F	
19	A16-P	11XC	
20	A15-P	11XC	
21	A12-P	11XC	
22	A07-P	11XD	
23	A06-P	11XD	
24	A05-P	11XD	
25	A04-P	11XD	
26	A03-P	11XD	
27	A02-P	11XD	
28	A01-P	11XD	
29	A00-P	11XD	
30	D00-P	113D	
31	D01-P	113D	
32	D02-P	113D	
33	WP	113F	
34	GND	11XF	
35	GND	11XG	
36	GD1-N	113E	
37	D11-P	113B	
38	D12-P	113B	
39	D13-P	113B	
40	D14-P	113B	
41	D15-P	113A	
42	CE2-N	11XE	
43	RFSH-N	11XE	
44	RFU	113F	
45	RFU	113F	
46	A17-P	11XB	
47	A18-P	11XB	
48	A19-P	11XB	
49	A20-P	11XB	
50	A21-P	11XB	

Pin No.	Signal Name	Location	
51	VCC	11XF	
52	VPP2	113F	
53	A22-P	11XB	
54	A23-P	11XB	
55	A24-P	11XB	
56	A25-P	11XA	
57	RFU	113G	
58	RFU	113G	
59	RFU	113G	
60	RFU	113G	
61	REG-N	11XF	
62	BVD2	113E	
63	BVD1	113E	
64	D08-P	113C	
65	D09-P	113C	
66	D10-P	113B	
67	CD2-N	113E	
68	GND	11XG	

Figure 5-107 Main Control PCB (OLCE-14/16)

Connector Name: 6F-OPanel
Part Number: 224A3590P0060
Part Symbol: CN5

Pin No.	Signal Name	Location	
1	OPLD-N	068B	
2	0V	068C	
3	OPDTOUT-P	068B	
4	OPDTIN-P	069B	
5	5V	068C	
6	OPCLK-N	068B	

Connector Name: 80F-Option
Part Number: 224A3516P0800
Part Symbol: CN11

Pin No.	Signal Name	Location	
01	-8V	129F	
02	0V	129F	
03	0V	123D	
04	NC	123D	
05	NC	129G	
06	0V	123D	
07	0V	129F	
08	INT1-N	123C	
09	IOS0-N	129E	
10	CS2-N	129D	
11	NC	129E	
12	ORDY-N	123B	
13	SCSAEQ-P	123C	
14	SCAAEQ-P	123C	
15	A08-P	129B	
16	A06-P	129B	
17	A04-P	129C	
18	A02-P	129C	
19	A00-P/ORE-N	129C	
20	A20-P	129A	
21	A17-P	129A	
22	DCAS1-N	129E	
23	A18-P	129A	
24	A15-P	129B	
25	A13-P	129B	
26	5V	129F	
27	A11-P	129B	
28	A09-P	129B	
29	DRAS2-N	129E	
30	DRAS4-N	129E	
31	D07-P	129D	
32	D05-P	129D	
33	D02-P	129D	
34	D00-P	129D	
35	0V	129F	
36	D14-P	129C	
37	D12-P	129C	
38	D11-P	129C	
39	D09-P	129C	
40	OPTION-N	123D	
41	0V	129E	
42	0V	123D	
43	SSTXD-P	129G	
44	EEPRMCLK-P	129G	
45	EEPRMCS1-P	129G	
46	5V	129F	
47	INT2-N	123B	
48	IOS1-N	129E	
49	CS3-N	129D	
50	NC	123B	

Pin No.	Signal Name	Location	
51	NC	123D	
52	RESET-N	129E	
53	NC	123D	
54	NC	123D	
55	A07-P	129B	
56	A05-P	129B	
57	A03-P	129C	
58	A01-P	129C	
59	A21-P	129A	
60	A19-P	129A	
61	DCAS0-N	129E	
62	RD-N	129D	
63	A16-P	129B	
64	A14-P	129B	
65	0V	129F	
66	A12-P	129B	
67	A10-P	129B	
68	WR-N	129D	
69	DRAS3-N	129E	
70	DRAS5-N	129E	
71	D06-P	129D	
72	D04-P	129D	
73	D03-P	129D	
74	D01-P	129D	
75	5V	129F	
76	D15-P	129C	
77	D13-P	129C	
78	D10-P	129C	
79	D08-P	129C	
80	0V	123D	

Connector Name: 8F-OptFdr
Part Number: 221A1530P0081
Part Symbol: CN6

Pin No.	Signal Name	Location	
1	OPTPSIN-N	068F	
2	OPTSCLK-N	068E	
3	OPTSD-P	0680	
4	OPTSDR-N	069E	
5	0VP	068F	
6	30V	068E	
7	0V	068F	
8	5V	068F	
9	FG	068G	
10	FG	068G	
11	FG	068G	

Figure 5-108 Main Control PCB (OLCE-15/16)

Connector Name: 9M-RS232C
Part Number: 220A1376P0095
Part Symbol: CN9

Pin No.	Signal Name	Location	
1	CD	102D	
2	RXD	102C	
3	TXD	10XB	
4	DTR	10XC	
5	SG	10XD	
6	DSR	102C	
7	RTS	10XC	
8	CTS	102D	
9	SSD	10XC	
10	FG	10XD	
11	FG	10XD	

Figure 5-109 Main Control PCB (OLCE-16/16)

	REV. 3	REV. 4
R14	1.6kΩ	10kΩ
R22	5.6kΩ	10kΩ
R23	5.6kΩ	10kΩ

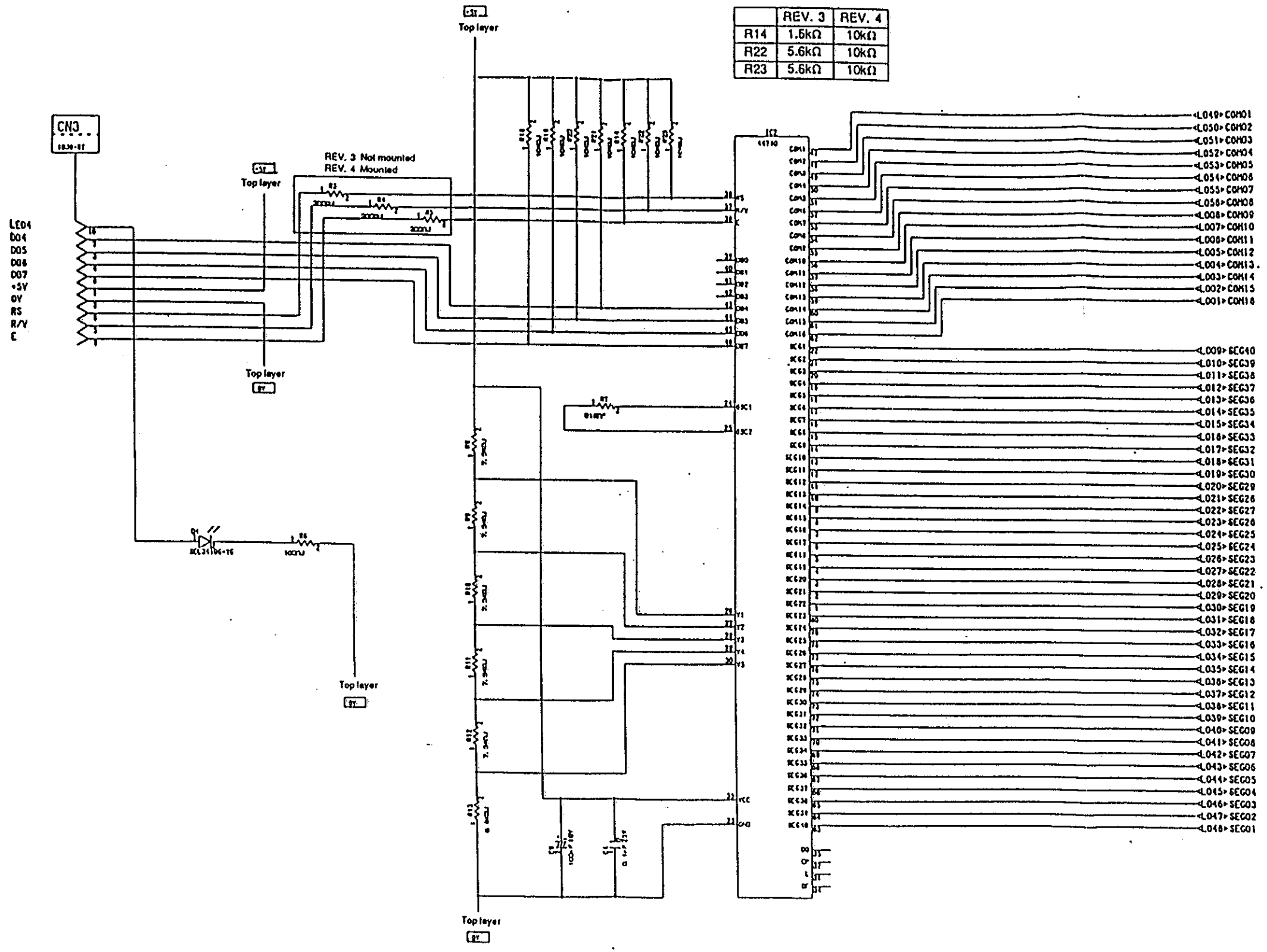


Figure 5-110 Operator Panel PCB (1/2) (OLLB-1/1) Circuit Diagram (Rev. 3 & 4)

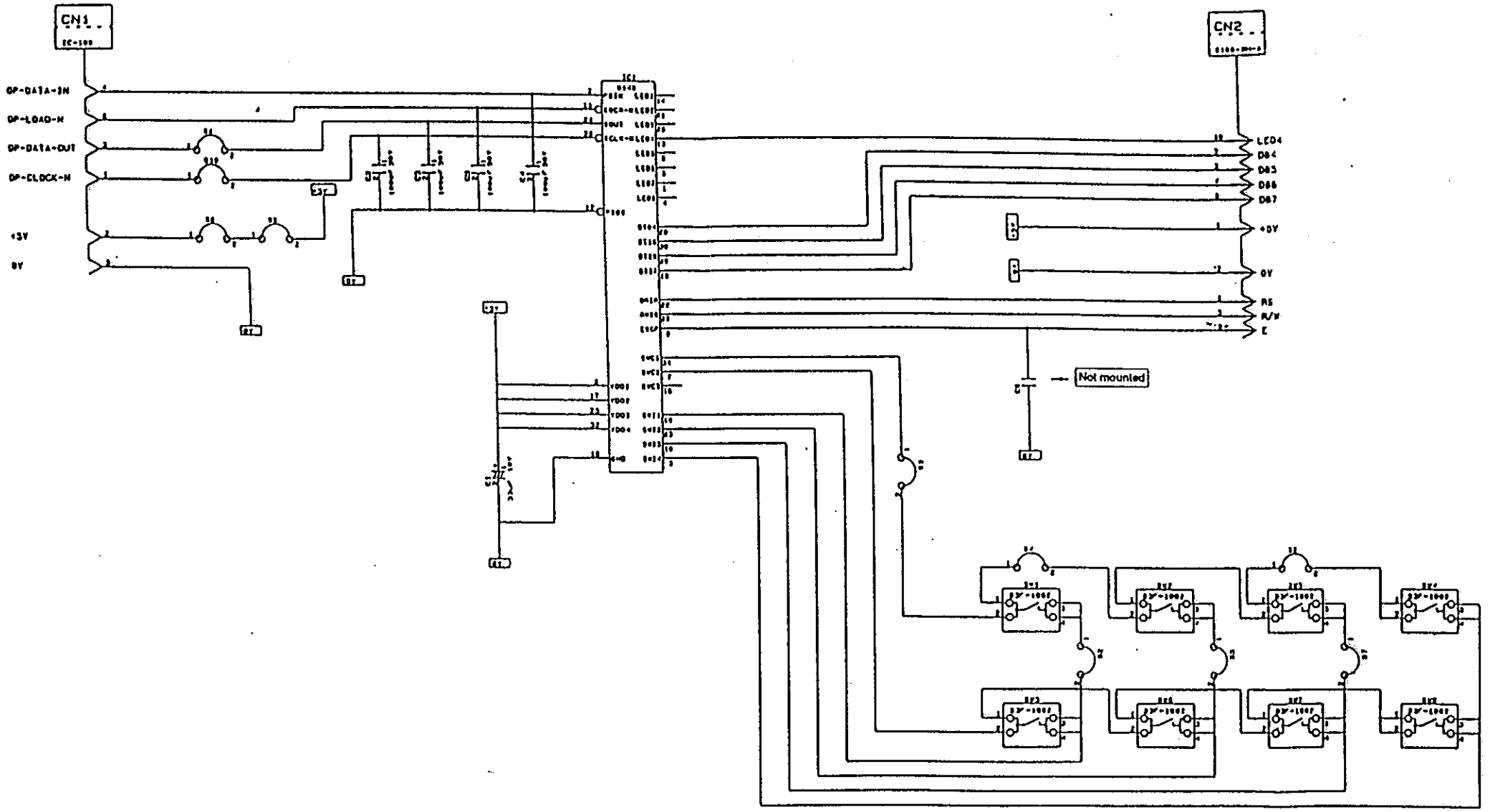


Figure 5-111 Operator Panel PCB (2/2) (OLLD-1/1) Circuit Diagram (Rev. 4 & 5)

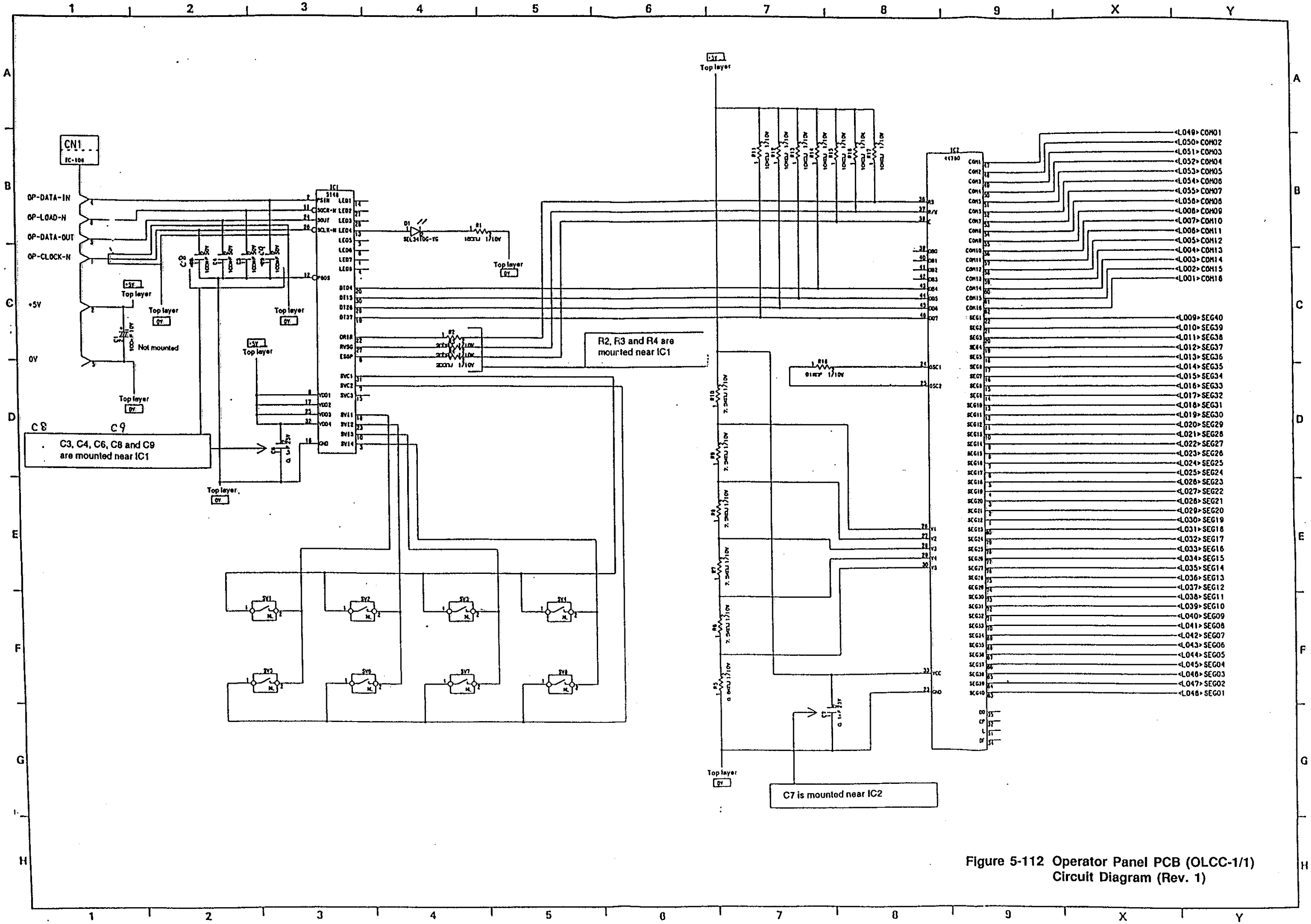


Figure 5-112 Operator Panel PCB (OLCC-1/1) Circuit Diagram (Rev. 1)

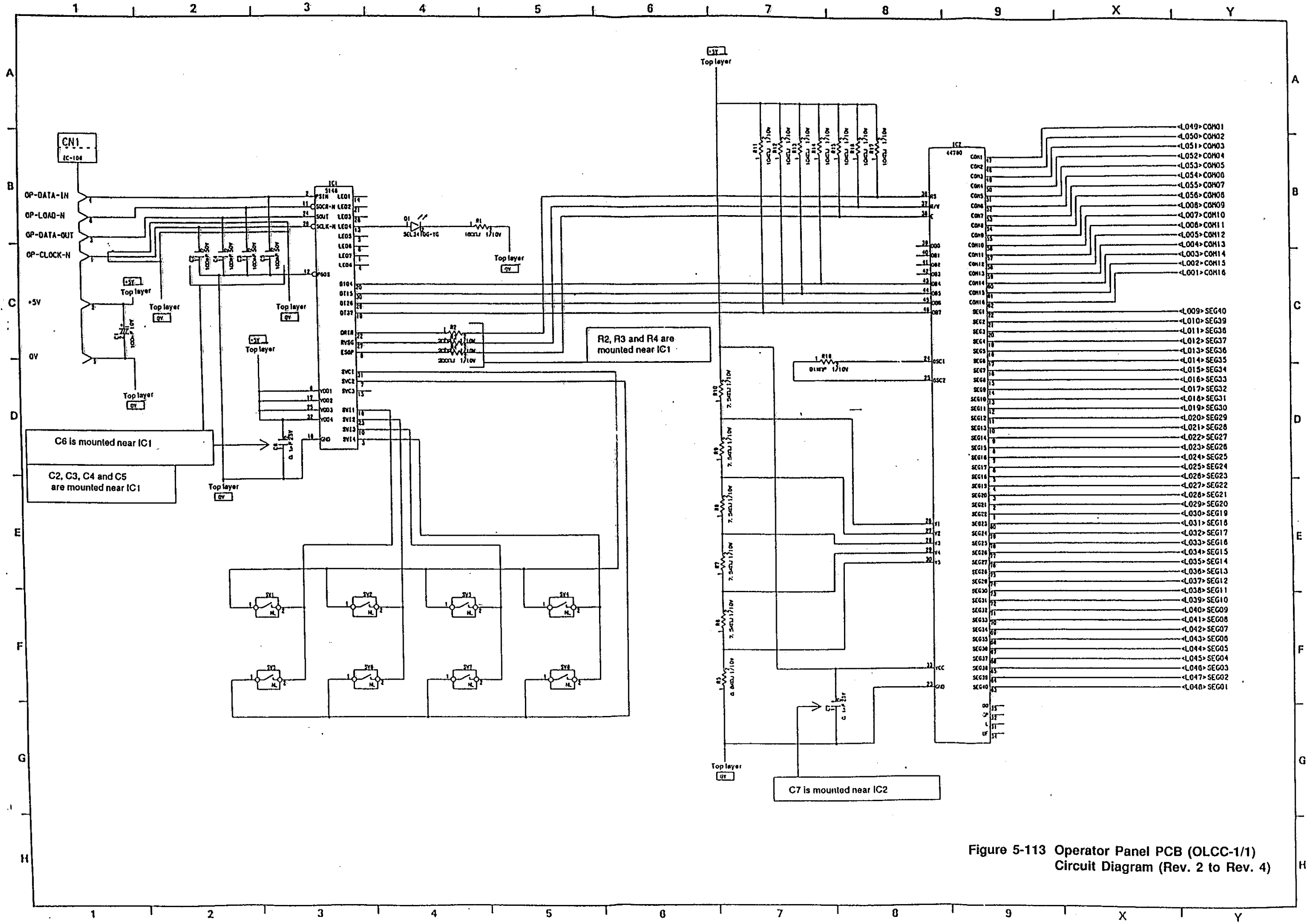


Figure 5-113 Operator Panel PCB (OLCC-1/1) Circuit Diagram (Rev. 2 to Rev. 4)

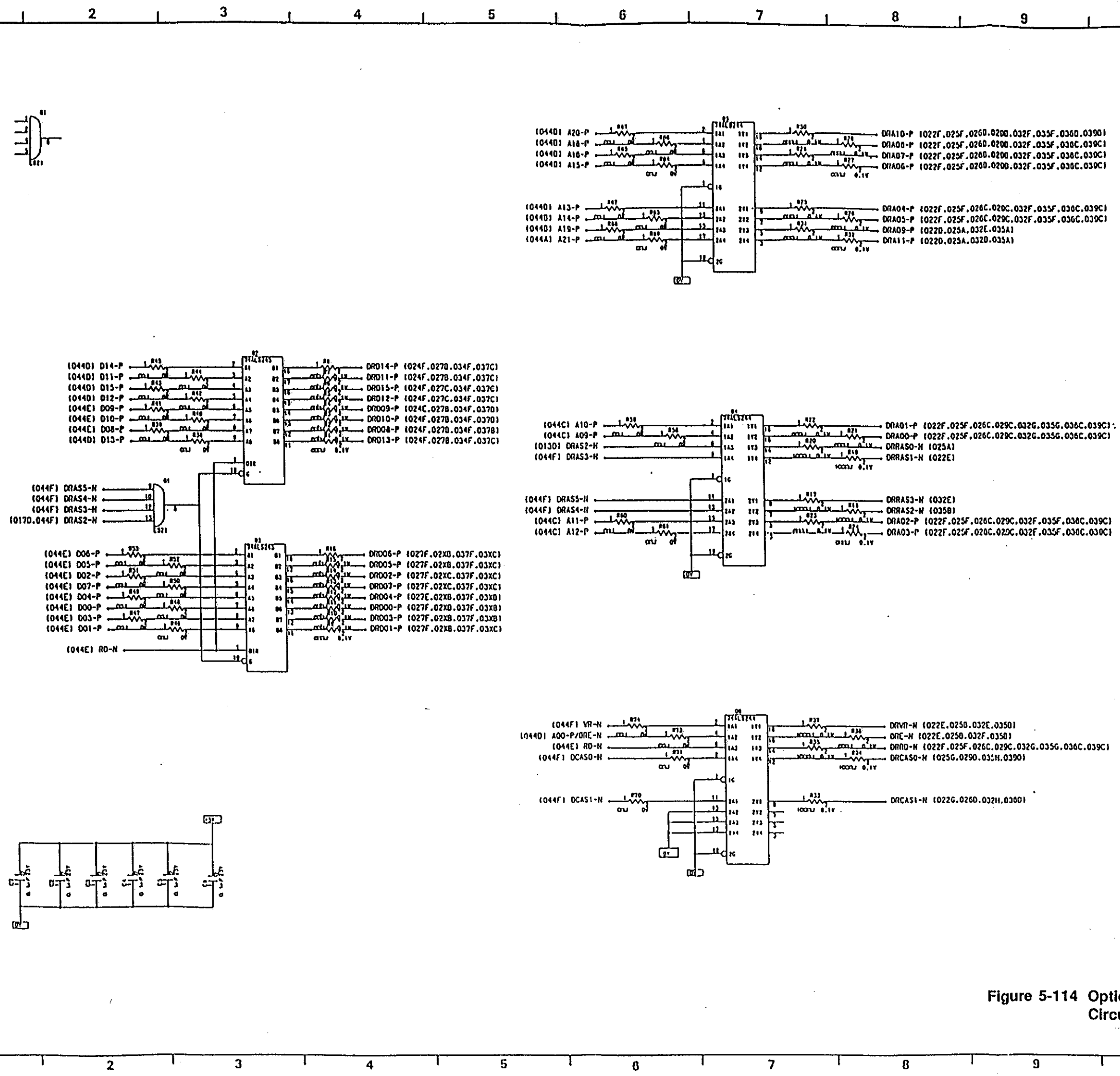


Figure 5-114 Option RAM PCB (OLCB-1/5) Circuit Diagram (Rev. 4)

Q7, Q8
SP1-SP4

A side	B side
4Mbit	16Mbit

Q9, Q10
SP5-SP8

A side	B side
4Mbit	16Mbit

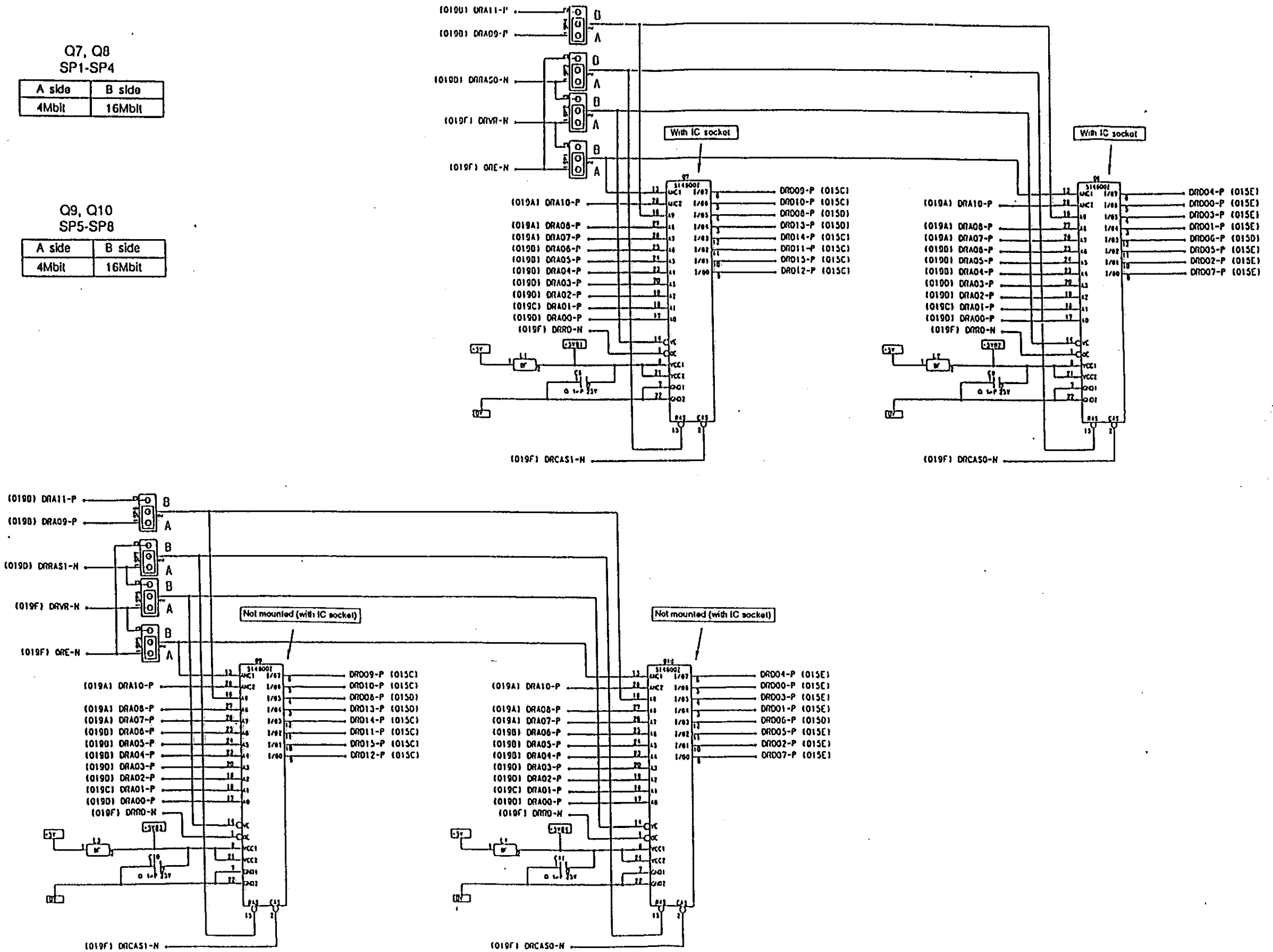


Figure 5-115 Option RAM PCB (OLCB-2/5) Circuit Diagram (Rev. 4)

Q11, Q12
SP9-SP12

A side	B side
4Mbit	16Mbit

Q13, Q16
SP13-SP16

A side	B side
4Mbit	16Mbit

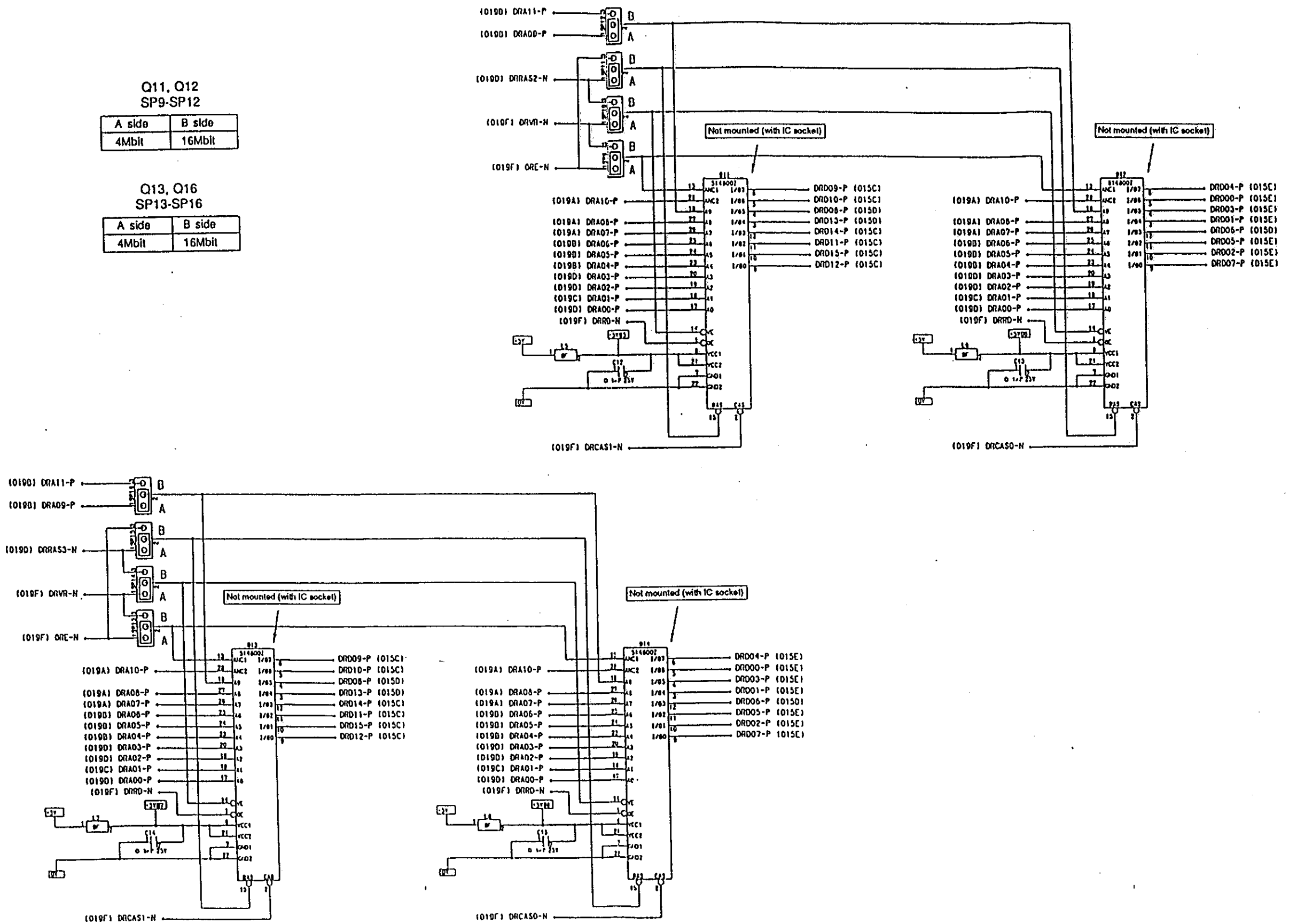


Figure 5-116 Option RAM PCB (OLCB-3/5)
Circuit Diagram (Rev. 4)

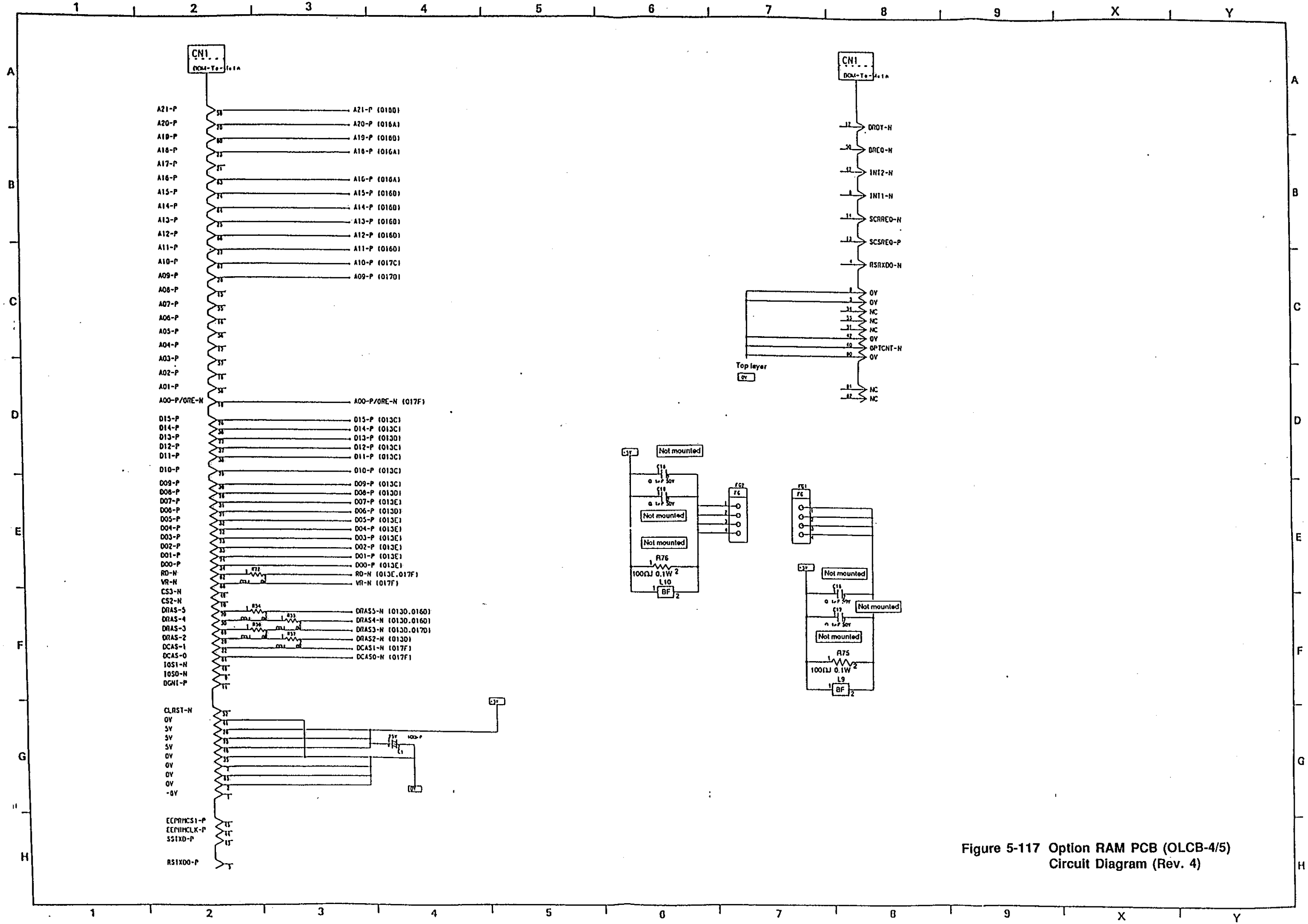


Figure 5-117 Option RAM PCB (OLCB-4/5) Circuit Diagram (Rev. 4)

Connector Name: 80M-to-Main
Part Number: 224A3515P0800
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	-0V	043G	
2	0V	043G	
3	0V	049C	
4	RSRXDO-N	049C	
5	RSTXDO-P	043H	
6	0V	049C	
7	0V	043G	
8	INT1-N	049B	
9	IOSO-N	043F	
10	CS2-N	043F	
11	BGNT-P	043F	
12	DRDY-N	049B	
13	SCSREQ-P	049C	
14	SCRREQ-N	049B	
15	A08-P	043C	
16	A06-P	043C	
17	A04-P	043C	
18	A02-P	043D	
19	A00-P/0RE-N	043D	
20	A20-P	043B	
21	A17-P	043B	
22	DCAS-1	043F	
23	A18-P	043B	
24	A15-P	043B	
25	A13-P	043B	
26	5V	043G	
27	A11-P	043C	
28	A09-P	043C	
29	DRAS-2	043F	
30	DRAS-4	043F	
31	D07-P	043E	
32	D05-P	043E	
33	D02-P	043E	
34	D00-P	043E	
35	0V	043G	
36	D14-P	043D	
37	D12-P	043D	
38	D11-P	043D	
39	D09-P	043E	
40	OPTCNT-N	049C	
41	0V	043G	
42	0V	049C	
43	SSTXD-P	043H	
44	EEPRMCLK-P	043H	
45	EEPRMCS1-P	043H	
46	5V	043G	
47	INT2-N	049B	
48	IOS1-N	043F	
49	CS3-N	043F	
50	DREQ-N	049B	

Pin No.	Signal Name	Location	
51	NC	049C	
52	CLRST-N	043G	
53	NC	049C	
54	NC	049C	
55	A07-P	043C	
56	A05-P	043C	
57	A03-P	043D	
58	A01-P	043D	
59	A21-P	043A	
60	A19-P	043B	
61	DCAS-0	043F	
62	RD-N	043E	
63	A16-P	043B	
64	A14-P	043B	
65	0V	043G	
66	A12-P	043C	
67	A10-P	043C	
68	WR-N	043F	
69	DRAS-3	043F	
70	DRAS-5	043F	
71	D06-P	043E	
72	D04-P	043E	
73	D03-P	043E	
74	D01-P	043E	
75	5V	043G	
76	D15-P	043D	
77	D13-P	043D	
78	D10-P	043E	
79	D08-P	043E	
80	0V	049D	
81	NC	049D	
82	NC	049D	

Figure 5-118 Option RAM PCB (OLCB-5/5) Circuit Diagram (Rev. 4)

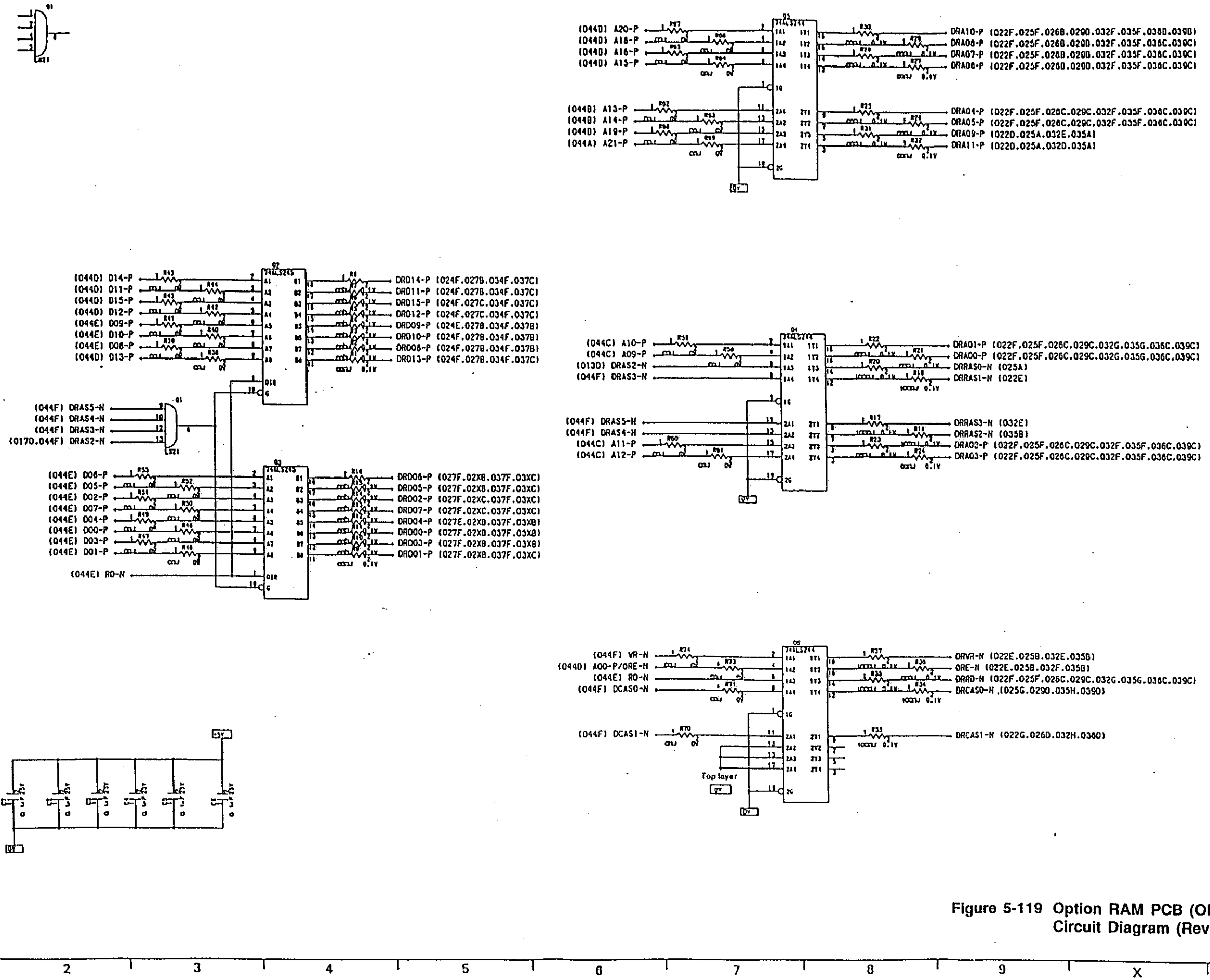


Figure 5-119 Option RAM PCB (OLCB-1/5) Circuit Diagram (Rev. 5 & 6)

Q7, Q8
SP1-SP4

A side	B side
4Mbit	16Mbit

Q9, Q10
SP5-SP8

A side	B side
4Mbit	16Mbit

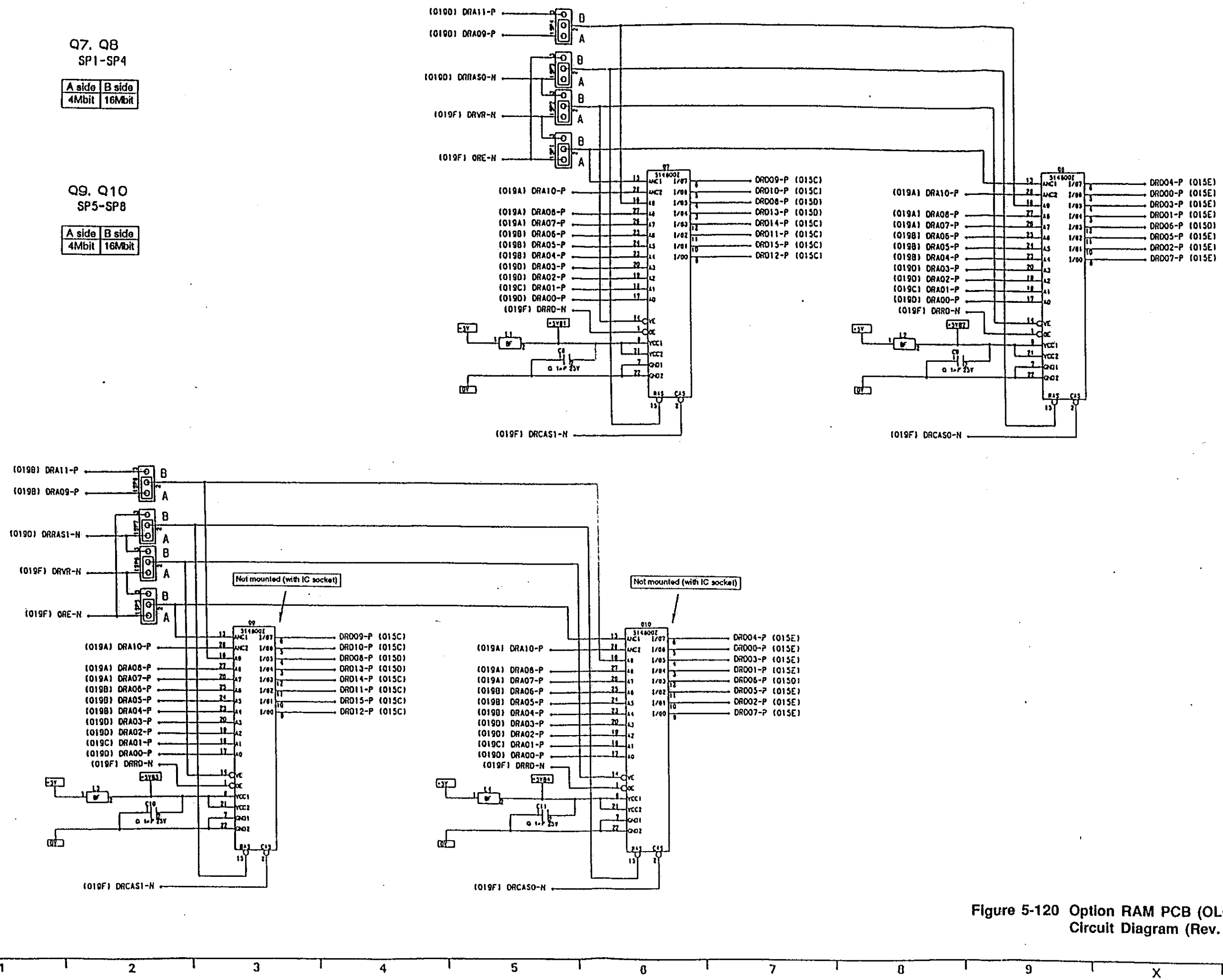


Figure 5-120 Option RAM PCB (OLCB-2/5)
Circuit Diagram (Rev. 5 & 6)

Q11. Q12

SP9-SP12

A side	B side
4Mbit	16Mbit

Q13. Q14

SP13-SP16

A side	B side
4Mbit	16Mbit

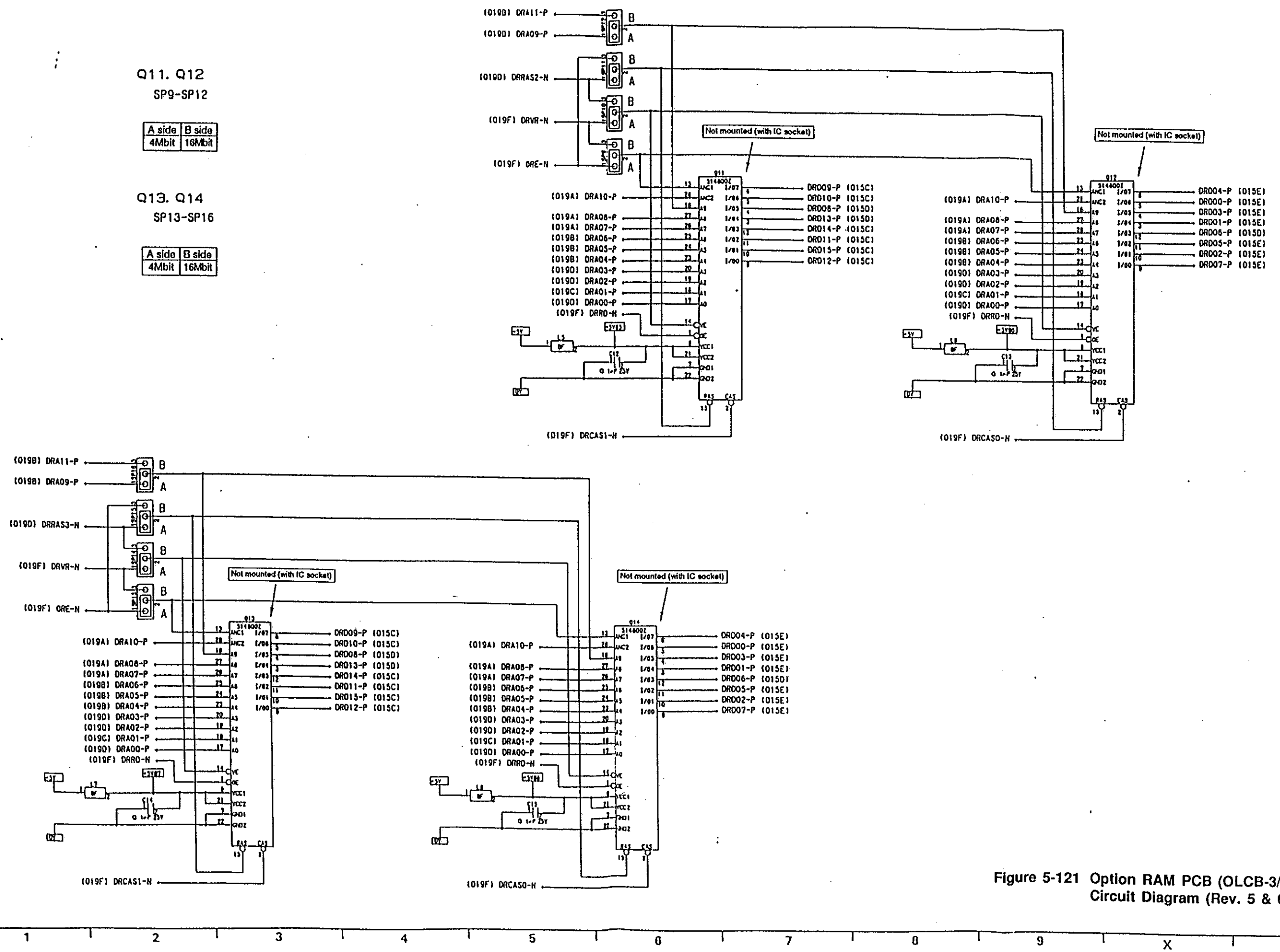


Figure 5-121 Option RAM PCB (OLCB-3/5) Circuit Diagram (Rev. 5 & 6)

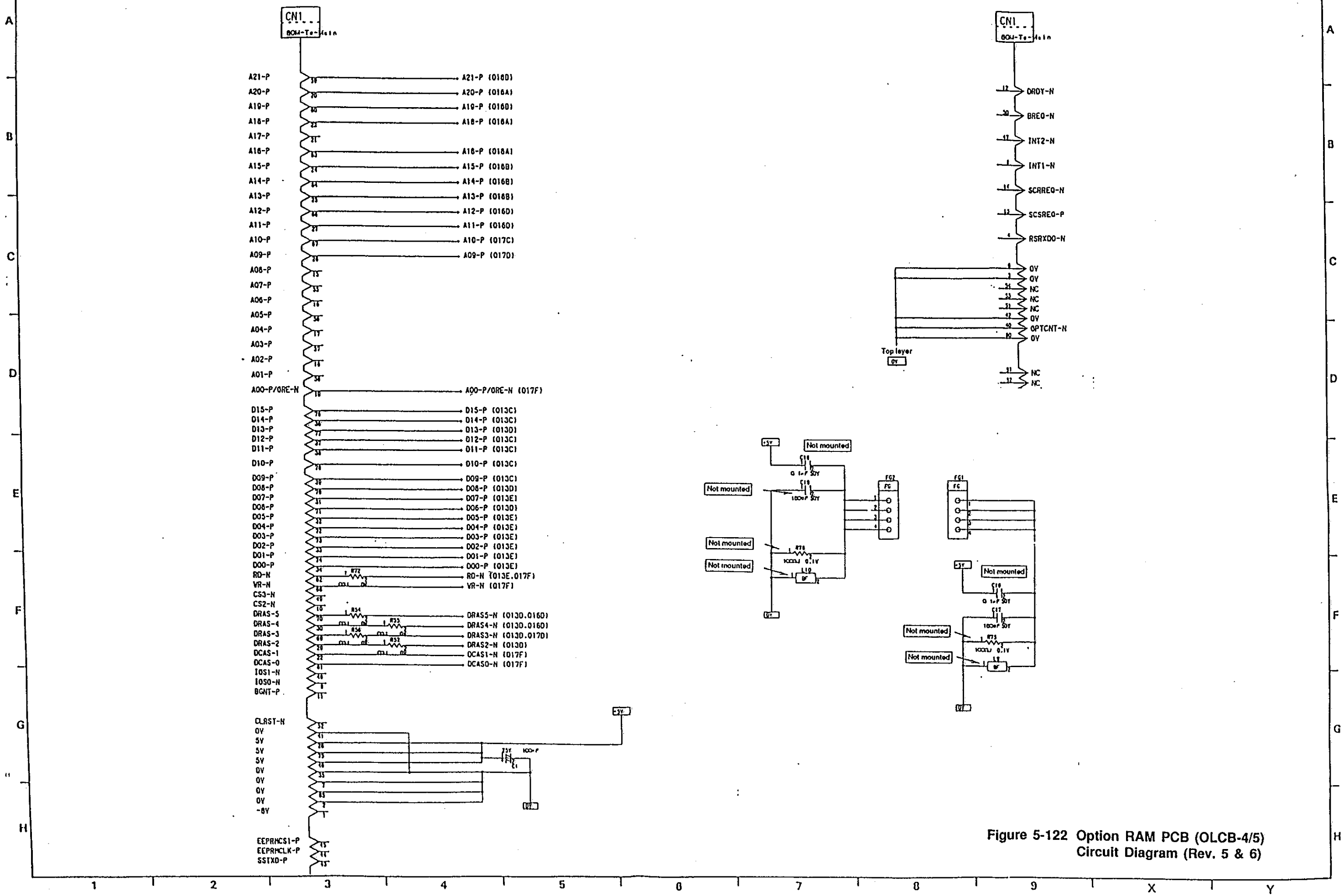


Figure 5-122 Option RAM PCB (OLCB-4/5) Circuit Diagram (Rev. 5 & 6)

Connector Name: 80M-to-Main
Part Number 224A3515P0800
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	-8V	043G	
2	0V	043G	
3	0V	049C	
4	RSRXDO-N	049C	
5	RSTXDO-P	043H	
6	0V	049C	
7	0V	043G	
8	INT1-N	049B	
9	IOSO-N	043F	
10	CS2-N	043F	
11	BGNT-P	043F	
12	DRDY-N	049B	
13	SCSREQ-P	049C	
14	SCRREQ-N	049B	
15	A08-P	043C	
16	A06-P	043C	
17	A04-P	043C	
18	A02-P	043D	
19	A00-P/0RE-N	043D	
20	A20-P	043B	
21	A17-P	043B	
22	DCAS-1	043F	
23	A18-P	043B	
24	A15-P	043B	
25	A13-P	043B	
26	5V	043G	
27	A11-P	043C	
28	A09-P	043C	
29	DRAS-2	043F	
30	DRAS-4	043F	
31	D07-P	043E	
32	D05-P	043E	
33	D02-P	043E	
34	D00-P	043E	
35	0V	043G	
36	D14-P	043D	
37	D12-P	043D	
38	D11-P	043D	
39	D09-P	043E	
40	OPTCNT-N	049C	
41	0V	043G	
42	0V	049C	
43	SSTXD-P	043H	
44	EEPRMCLK-P	043H	
45	EEPRMCS1-P	043H	
46	5V	043G	
47	INT2-N	049B	
48	IOS1-N	043F	
49	CS3-N	043F	
50	BREQ-N	049B	

Pin No.	Signal Name	Location	
51	NC	049C	
52	CLRST-N	043G	
53	NC	049C	
54	NC	049C	
55	A07-P	043C	
56	A05-P	043C	
57	A03-P	043D	
58	A01-P	043D	
59	A21-P	043A	
60	A19-P	043B	
61	DCAS-0	043F	
62	RD-N	043E	
63	A16-P	043B	
64	A14-P	043B	
65	0V	043G	
66	A12-P	043C	
67	A10-P	043C	
68	WR-N	043F	
69	DRAS-3	043F	
70	DRAS-5	043F	
71	D06-P	043E	
72	D04-P	043E	
73	D03-P	043E	
74	D01-P	043E	
75	5V	043G	
76	D15-P	043D	
77	D13-P	043D	
78	D10-P	043E	
79	D08-P	043E	
80	0V	049D	
81	NC	049D	
82	NC	049D	

Figure 5-123 Option RAM PCB (OLCB-5/5)
Circuit Diagram (Rev. 5 & 6)

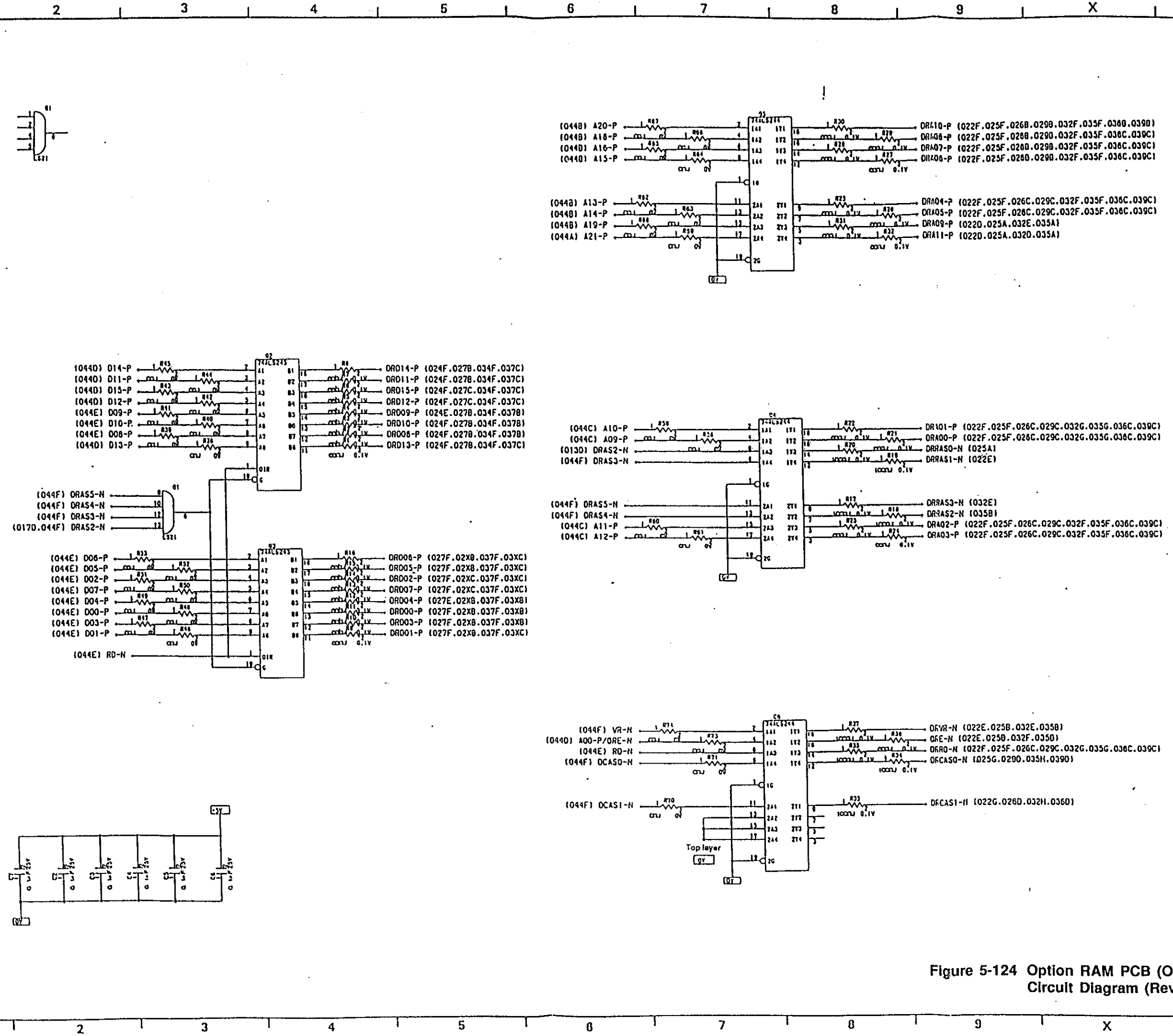


Figure 5-124 Option RAM PCB (OLCB-1/5)
Circuit Diagram (Rev. 7 Type A)

Q7, Q8
SP1-SP4

A side	B side
4Mbit	16Mbit

Q9, Q10
SP5-SP8

A side	B side
4Mbit	16Mbit

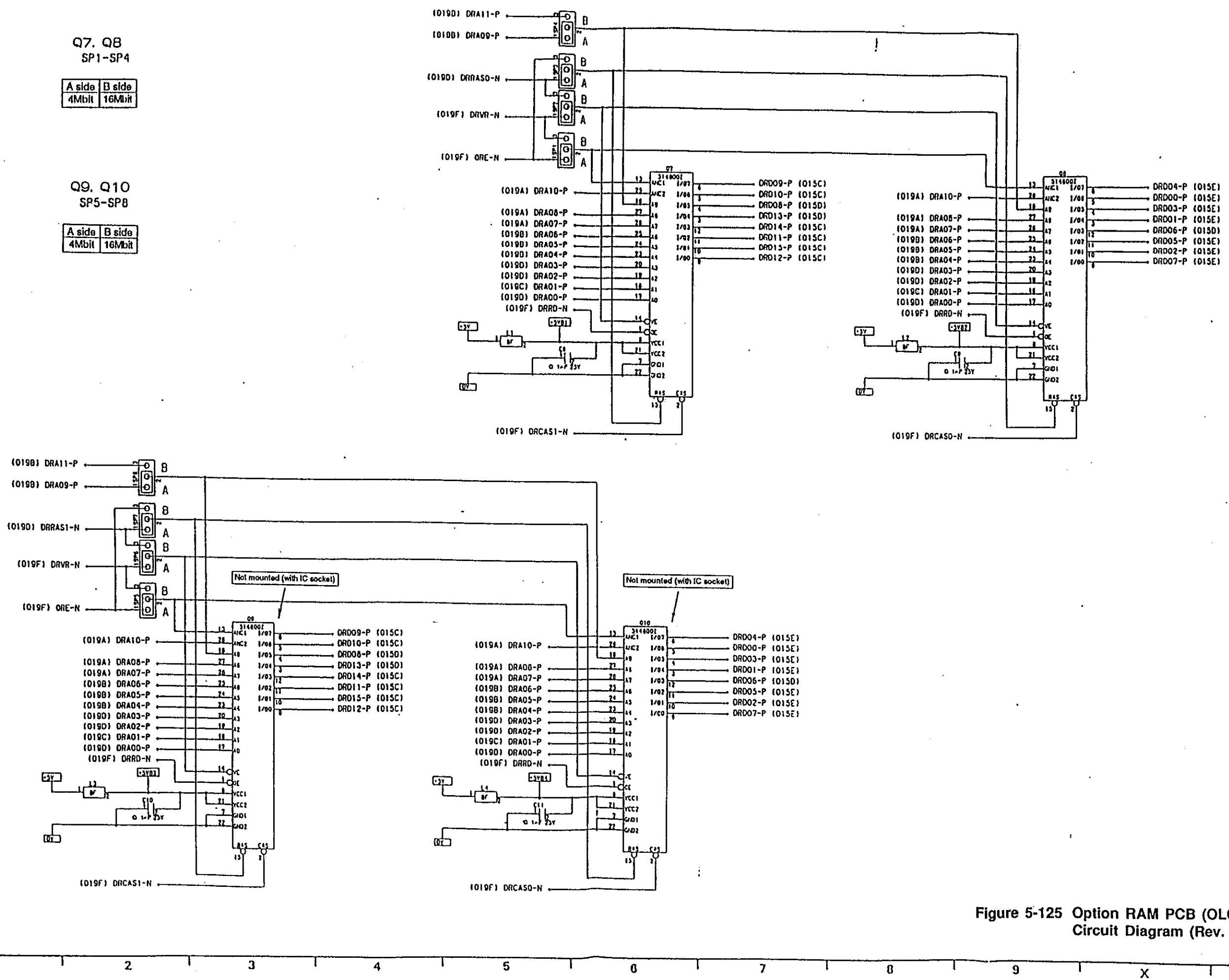


Figure 5-125 Option RAM PCB (OLCB-2/5)
Circuit Diagram (Rev. 7 Type A)

Q11. Q12
SP9-SP12

A side	B side
4Mbit	16Mbit

Q13. Q14
SP13-SP16

A side	B side
4Mbit	16Mbit

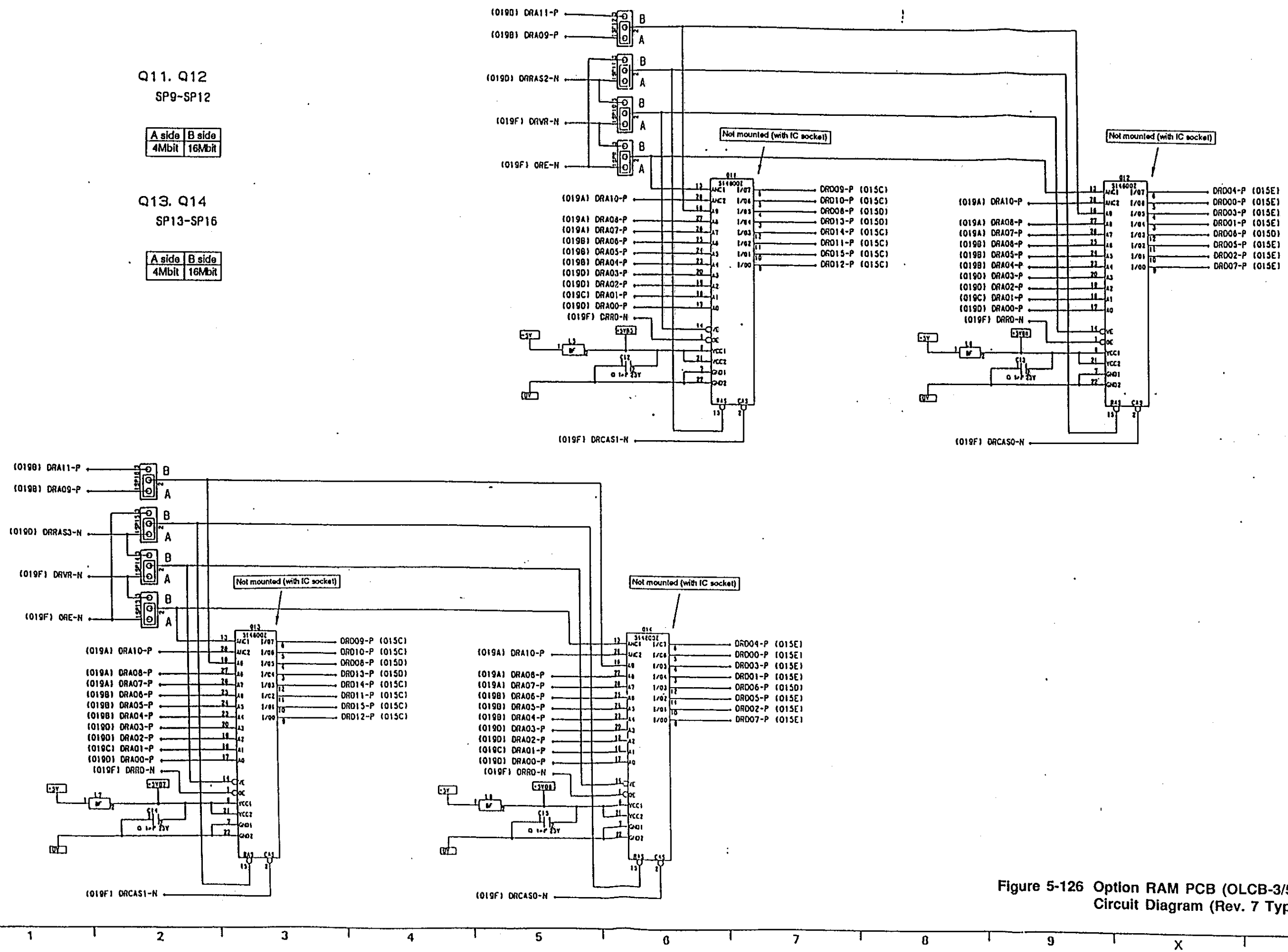


Figure 5-126 Option RAM PCB (OLCB-3/5)
Circuit Diagram (Rev. 7 Type A)

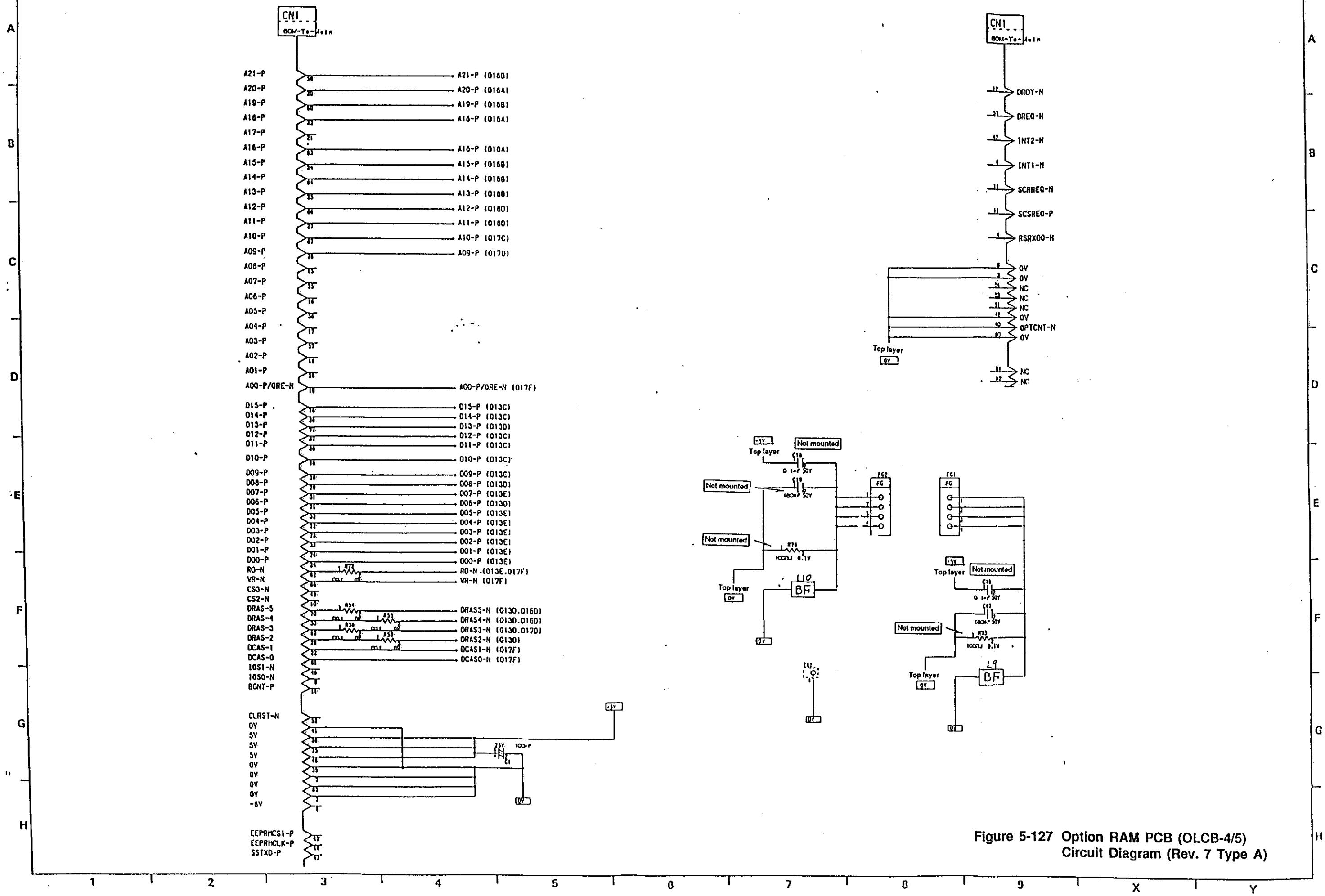


Figure 5-127 Option RAM PCB (OLCB-4/5) Circuit Diagram (Rev. 7 Type A)

Connector Name: 80M-to-Main
Part Number: 224A3515P0800
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	-8V	043G	
2	0V	043G	
3	0V	049C	
4	RSRXDO-N	049C	
5	RSTXDO-P	043H	
6	0V	049C	
7	0V	043G	
8	INT1-N	049B	
9	IOSO-N	043F	
10	CS2-N	043F	
11	BGNT-P	043F	
12	ORDY-N	049B	
13	SCSREQ-P	049C	
14	SCRREQ-N	049B	
15	A08-P	043C	
16	A06-P	043C	
17	A04-P	043C	
18	A02-P	043D	
19	A00-P/0RE-N	043D	
20	A20-P	043B	
21	A17-P	043B	
22	DCAS-1	043F	
23	A18-P	043B	
24	A15-P	043B	
25	A13-P	043B	
26	5V	043G	
27	A11-P	043C	
28	A09-P	043C	
29	DRAS-2	043F	
30	DRAS-4	043F	
31	D07-P	043E	
32	D05-P	043E	
33	D02-P	043E	
34	D00-P	043E	
35	0V	043G	
36	D14-P	043D	
37	D12-P	043D	
38	D11-P	043D	
39	D09-P	043E	
40	0PTCNT-N	049C	
41	0V	043G	
42	0V	049C	
43	SSTXO-P	043H	
44	EEPRMCLK-P	043H	
45	EEPRMCS1-P	043H	
46	5V	043G	
47	INT2-N	049B	
48	IOS1-N	043F	
49	CS3-N	043F	
50	BREQ-N	049B	

Pin No.	Signal Name	Location	
51	NC	049C	
52	CLRST-N	043G	
53	NC	049C	
54	NC	049C	
55	A07-P	043C	
56	A05-P	043C	
57	A03-P	043D	
58	A01-P	043D	
59	A21-P	043A	
60	A19-P	043B	
61	DCAS-0	043F	
62	RD-N	043E	
63	A16-P	043B	
64	A14-P	043B	
65	0V	043G	
66	A12-P	043C	
67	A10-P	043C	
68	WR-N	043F	
69	DRAS-3	043F	
70	DRAS-5	043F	
71	D06-P	043E	
72	D04-P	043E	
73	D03-P	043E	
74	D01-P	043E	
75	5V	043G	
76	D15-P	043D	
77	D13-P	043D	
78	D10-P	043E	
79	D08-P	043E	
80	0V	049D	
81	NC	049D	
82	NC	049D	

Figure 5-128 Option RAM PCB (OLCB-5/5) Circuit Diagram (Rev. 7 Type A)

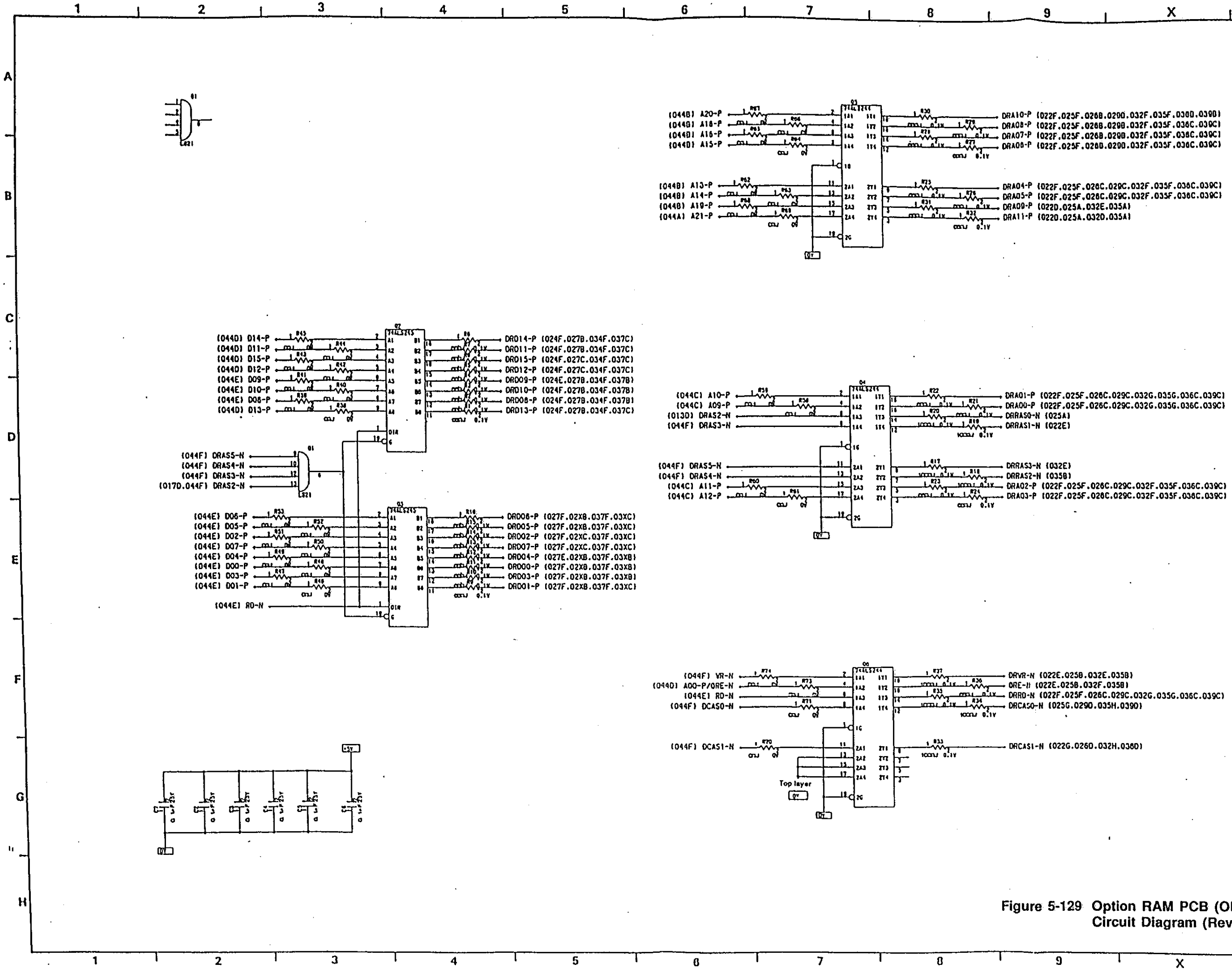


Figure 5-129 Option RAM PCB (OLCB-1/5)
Circuit Diagram (Rev. 7 Type B)

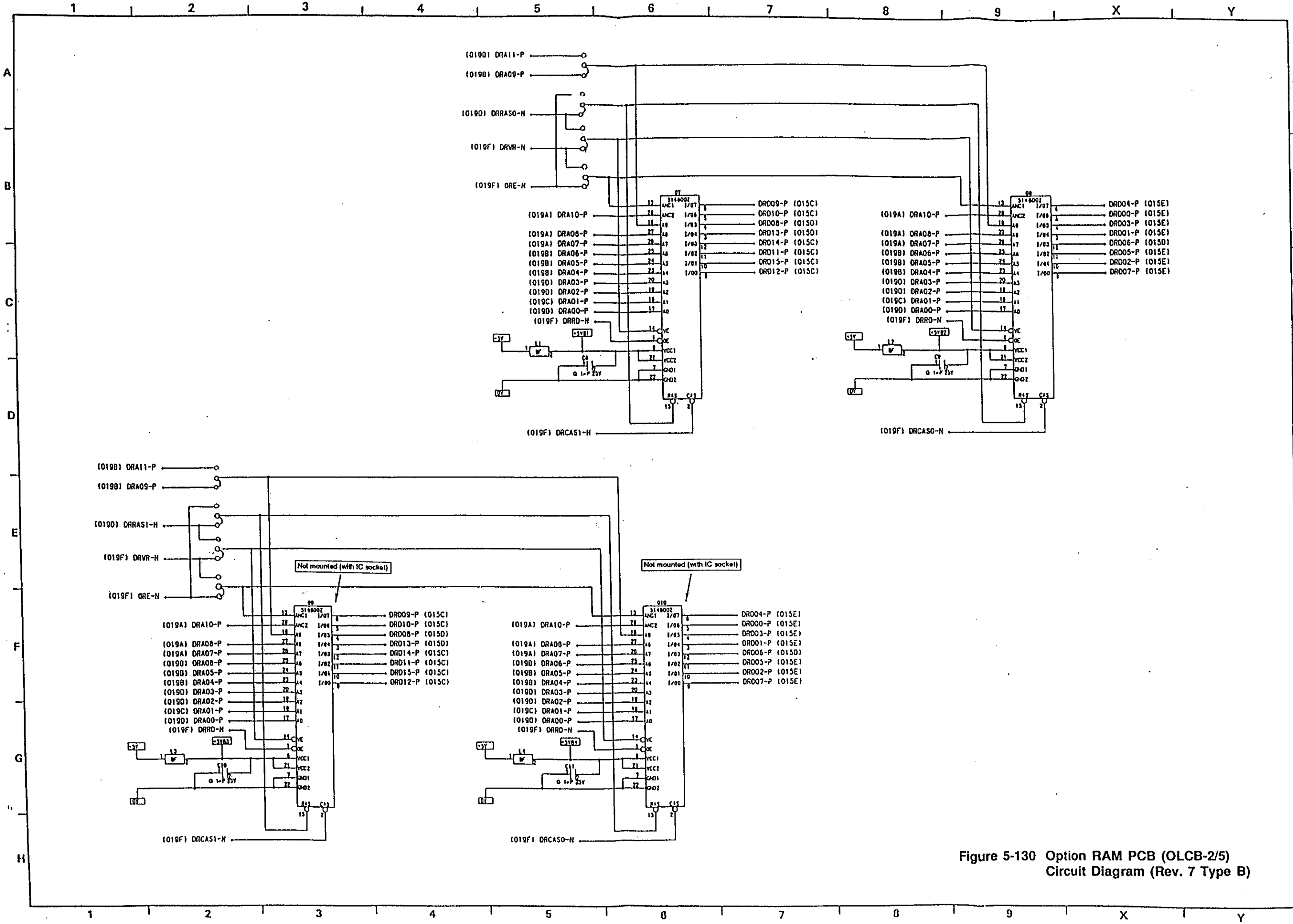


Figure 5-130 Option RAM PCB (OLCB-2/5) Circuit Diagram (Rev. 7 Type B)

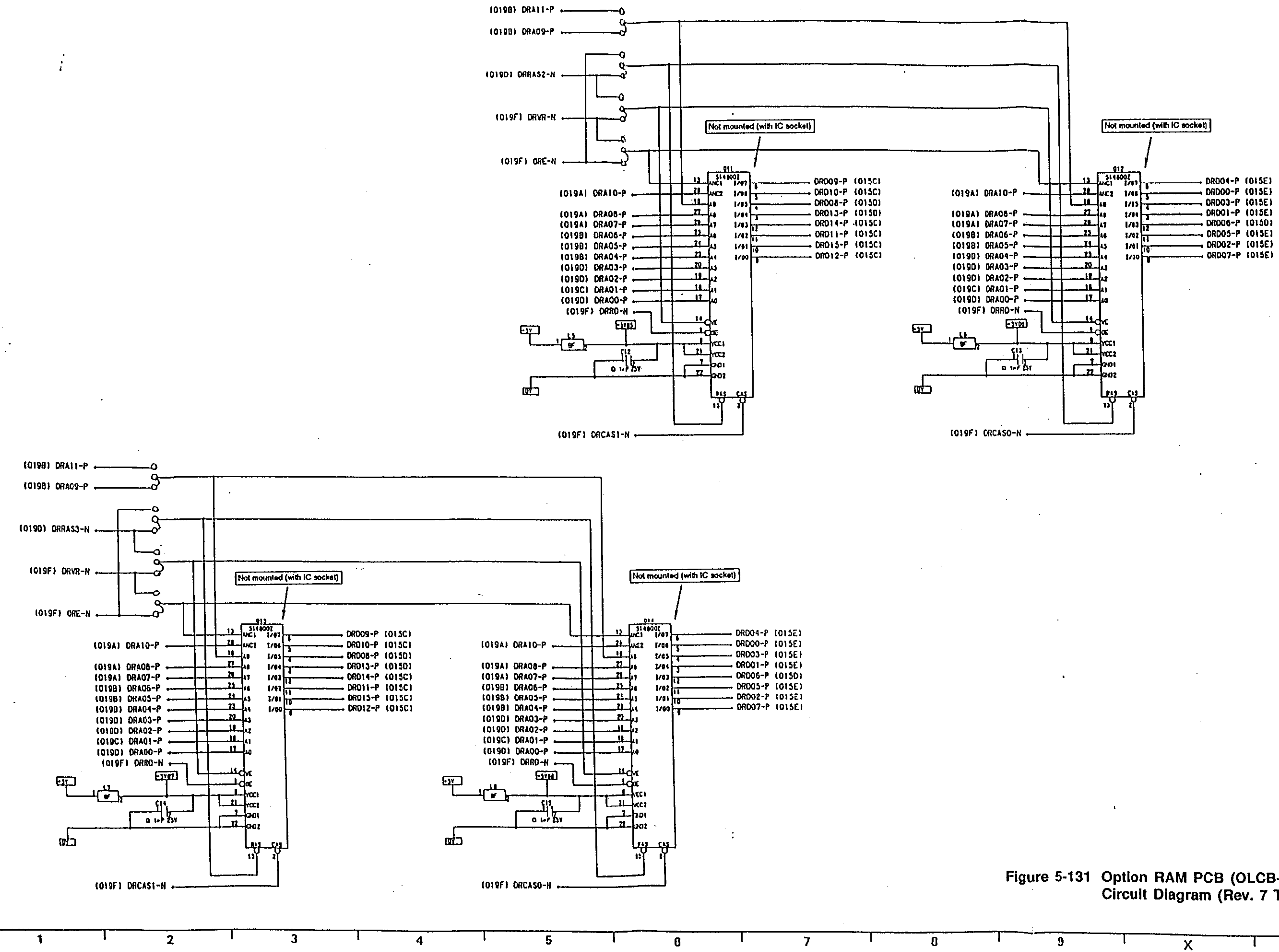


Figure 5-131 Option RAM PCB (OLCB-3/5) Circuit Diagram (Rev. 7 Type B)

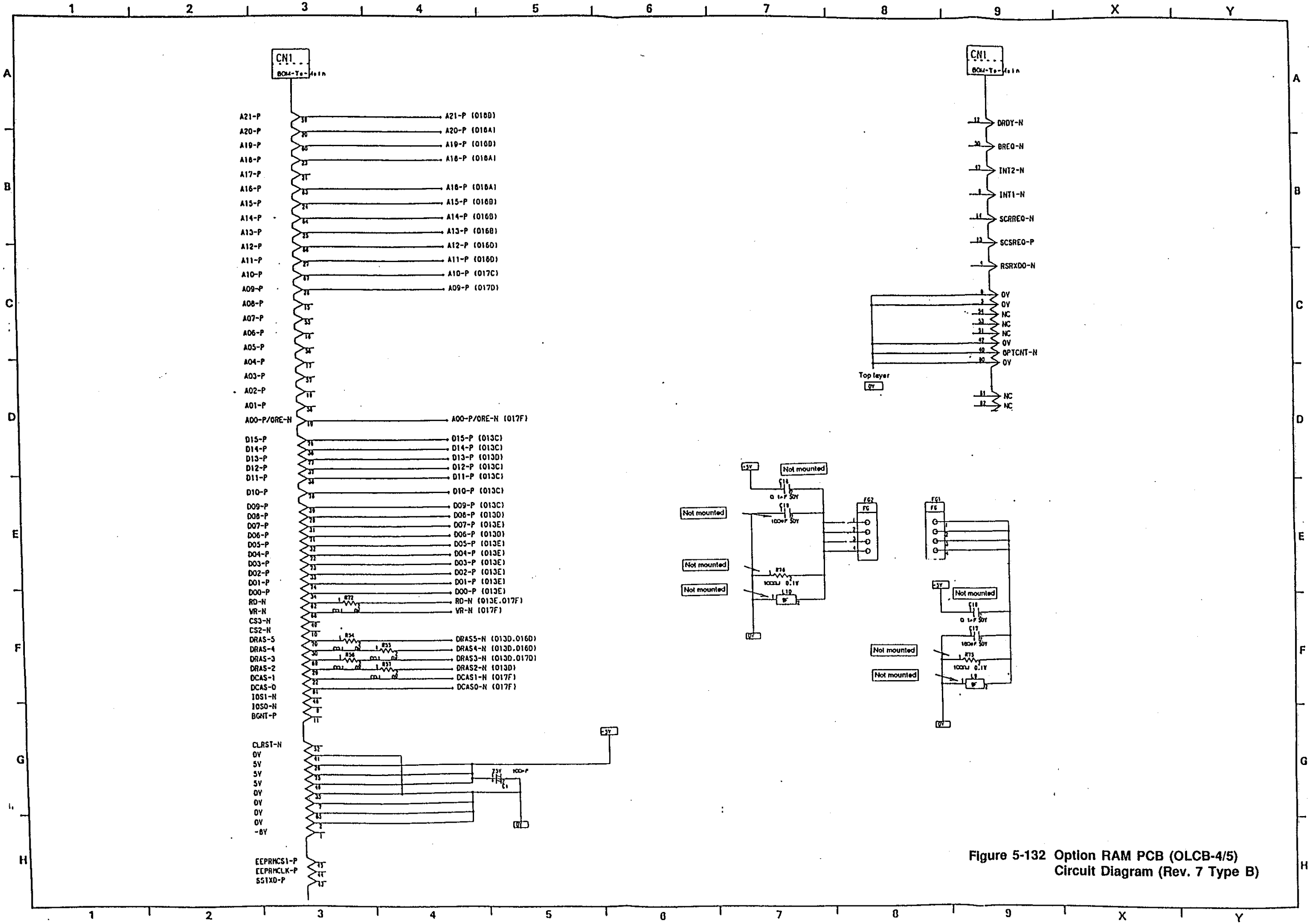


Figure 5-132 Option RAM PCB (OLCB-4/5)
Circuit Diagram (Rev. 7 Type B)

Connector Name: 80M-to-Main
Part Number: 224A3515P0800
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	-8V	043G	
2	0V	043G	
3	0V	049C	
4	RSRXDO-N	049C	
5	RSTXDO-P	043H	
6	0V	049C	
7	0V	043G	
8	INT1-N	049B	
9	IOSO-N	043F	
10	CS2-N	043F	
11	BGNT-P	043F	
12	DRDY-N	049B	
13	SCSREQ-P	049C	
14	SCRREQ-N	049B	
15	A08-P	043C	
16	A06-P	043C	
17	A04-P	043C	
18	A02-P	043D	
19	A00-P/ORE-N	043D	
20	A20-P	043B	
21	A17-P	043B	
22	DCAS-1	043F	
23	A18-P	043B	
24	A15-P	043B	
25	A13-P	043B	
26	5V	043G	
27	A11-P	043C	
28	A09-P	043C	
29	DRAS-2	043F	
30	DRAS-4	043F	
31	D07-P	043E	
32	D05-P	043E	
33	D02-P	043E	
34	D00-P	043E	
35	0V	043G	
36	D14-P	043D	
37	D12-P	043D	
38	D11-P	043D	
39	D09-P	043E	
40	OPTCNT-N	049C	
41	0V	043G	
42	0V	049C	
43	SSTXD-P	043H	
44	EEPRMCLK-P	043H	
45	EEPRMCS1-P	043H	
46	5V	043G	
47	INT2-N	049B	
48	IOS1-N	043F	
49	CS3-N	043F	
50	BREQ-N	049B	

Pin No.	Signal Name	Location	
51	NC	049C	
52	CLRST-N	043G	
53	NC	049C	
54	NC	049C	
55	A07-P	043C	
56	A05-P	043C	
57	A03-P	043D	
58	A01-P	043D	
59	A21-P	043A	
60	A19-P	043B	
61	DCAS-0	043F	
62	RD-N	043E	
63	A16-P	043B	
64	A14-P	043B	
65	0V	043G	
66	A12-P	043C	
67	A10-P	043C	
68	WR-N	043F	
69	DRAS-3	043F	
70	DRAS-5	043F	
71	D06-P	043E	
72	D04-P	043E	
73	D03-P	043E	
74	D01-P	043E	
75	5V	043G	
76	D15-P	043D	
77	D13-P	043D	
78	D10-P	043E	
79	D08-P	043E	
80	0V	049D	
81	NC	049D	
82	NC	049D	

Figure 5-133 Option RAM PCB (OLCB-5/5) Circuit Diagram (Rev. 7 Type B)

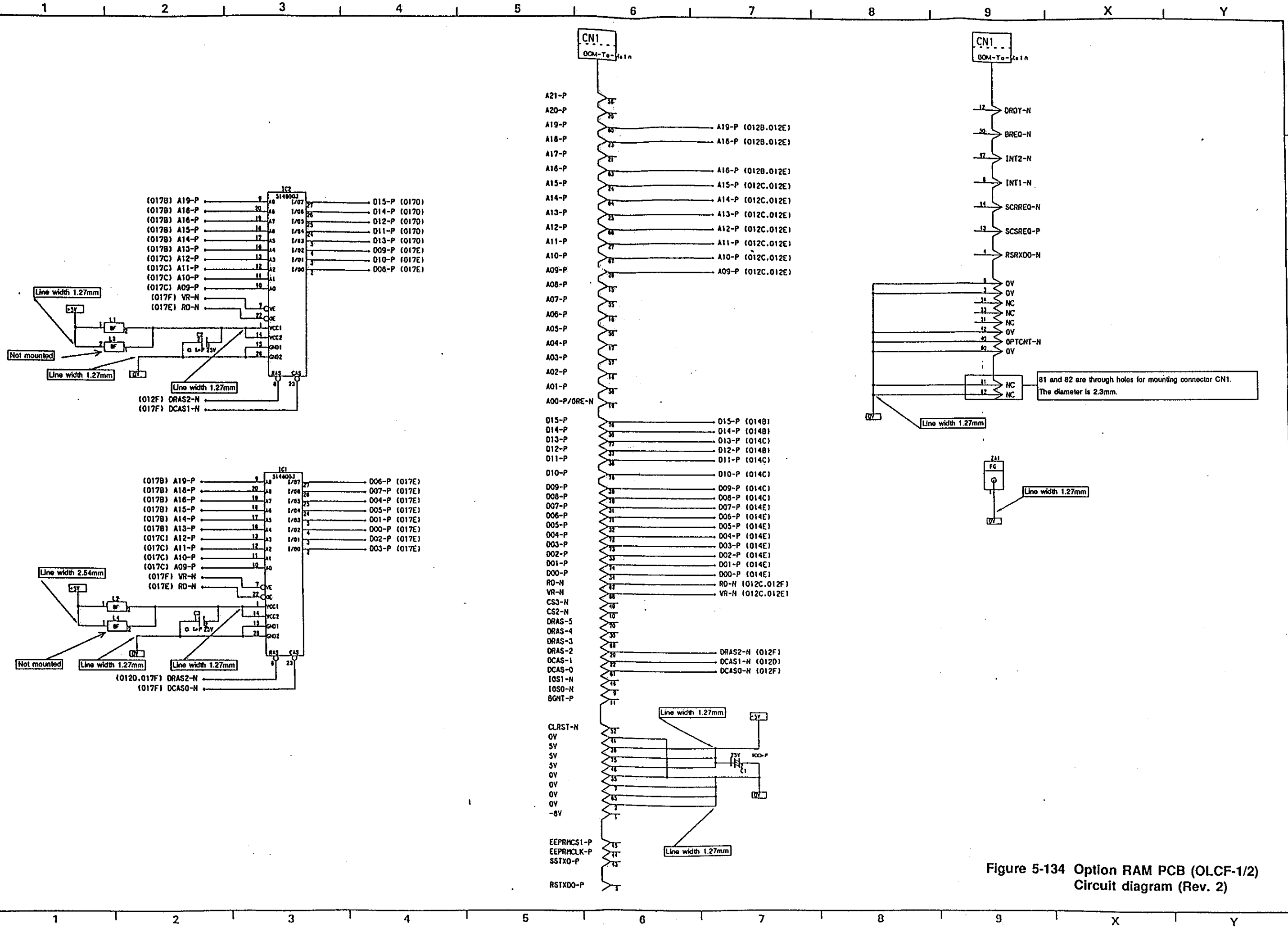


Figure 5-134 Option RAM PCB (OLCF-1/2) Circuit diagram (Rev. 2)

Connector Name: 80M-to-Main
Part Number: 224A3515P0800
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	-8V	016G	
2	0V	016G	
3	0V	019C	
4	RSRXD0-N	019C	
5	RSTXD0-P	016H	
6	0V	019C	
7	0V	016G	
8	INT1-N	019B	
9	IOS0-N	016F	
10	CS2-N	016F	
11	BGNT-P	016F	
12	DRDY-N	019B	
13	SCSREQ-P	019C	
14	SCRREQ-N	019B	
15	A08-P	016C	
16	A06-P	016C	
17	A04-P	016C	
18	A02-P	016D	
19	A00-P/0RE-N	016D	
20	A20-P	016B	
21	A17-P	016B	
22	DCAS-1	016F	
23	A18-P	016B	
24	A15-P	016B	
25	A13-P	016B	
26	5V	016G	
27	A11-P	016C	
28	A09-P	016C	
29	DRAS-2	016F	
30	DRAS-4	016F	
31	D07-P	016E	
32	D05-P	016E	
33	D02-P	016E	
34	D00-P	016E	
35	0V	016G	
36	D14-P	016D	
37	D12-P	016D	
38	D11-P	016D	
39	D09-P	016E	
40	0PTCNT-N	019C	
41	0V	016G	
42	0V	019C	
43	SSTXD-P	016H	
44	EEPRMCLK-P	016H	
45	EEPRMCS1-P	016H	
46	5V	016G	
47	INT2-N	019B	
48	IOS1-N	016F	
49	CS3-N	016F	
50	BREQ-N	019B	

Pin No.	Signal Name	Location	
51	NC	019C	
52	CLRST-N	016G	
53	NC	019C	
54	NC	019C	
55	A07-P	016C	
56	A05-P	016C	
57	A03-P	016D	
58	A01-P	016D	
59	A21-P	016A	
60	A19-P	016B	
61	DCAS-0	016F	
62	RD-N	016E	
63	A16-P	016B	
64	A14-P	016B	
65	0V	016G	
66	A12-P	016C	
67	A10-P	016C	
68	WR-N	016F	
69	DRAS-3	016F	
70	DRAS-5	016F	
71	D06-P	016E	
72	D04-P	016E	
73	D03-P	016E	
74	D01-P	016E	
75	5V	016G	
76	D15-P	016D	
77	D13-P	016D	
78	D10-P	016E	
79	D08-P	016E	
80	0V	019D	
81	NC	019D	
82	NC	019D	

Figure 5-135 Option RAM PCB (OLCF-2/2)
Circuit diagram (Rev. 2)

Figure 5-136 PostScript PCB (OLPT-1/7)
Circuit diagram (Rev. 5)

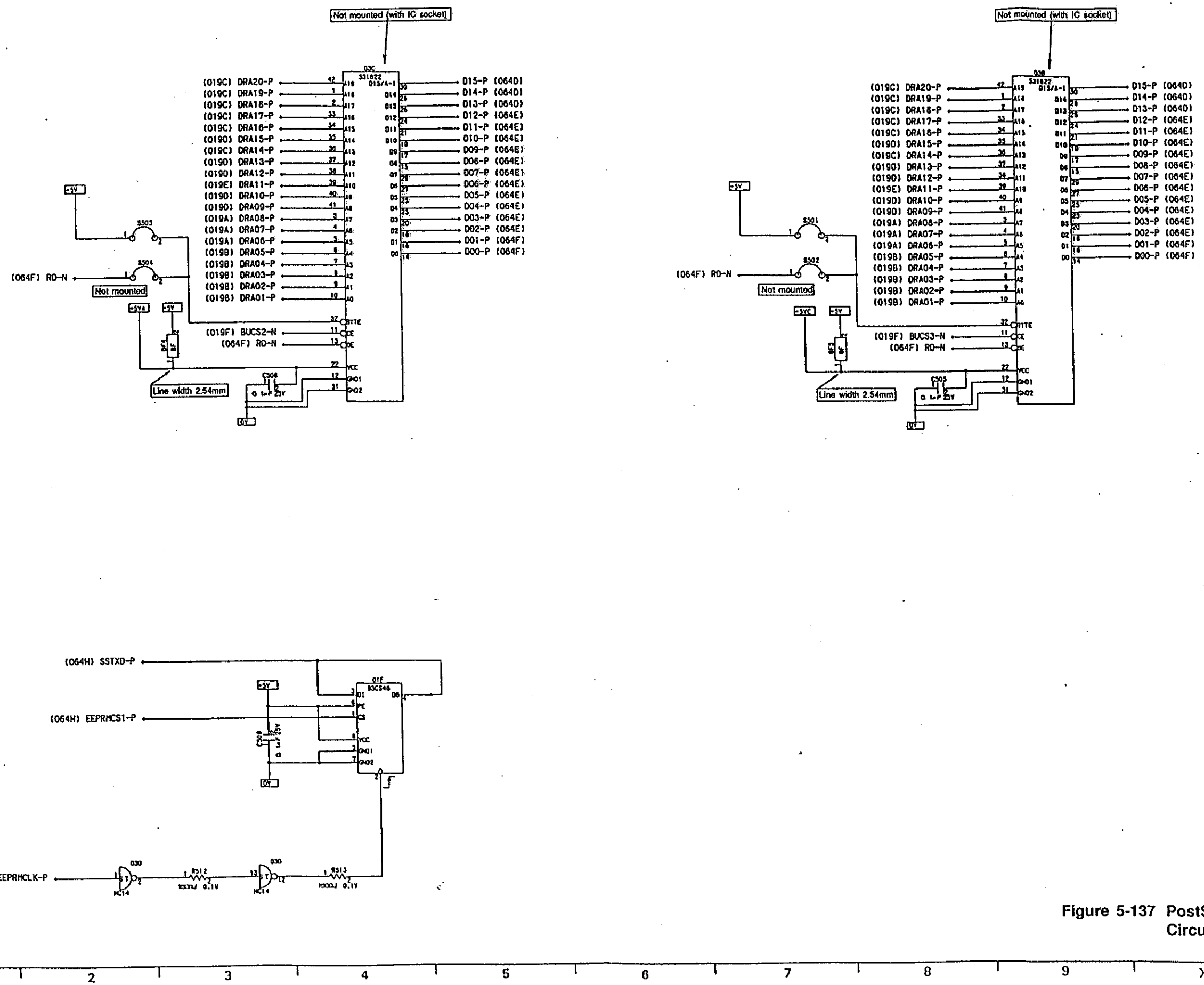
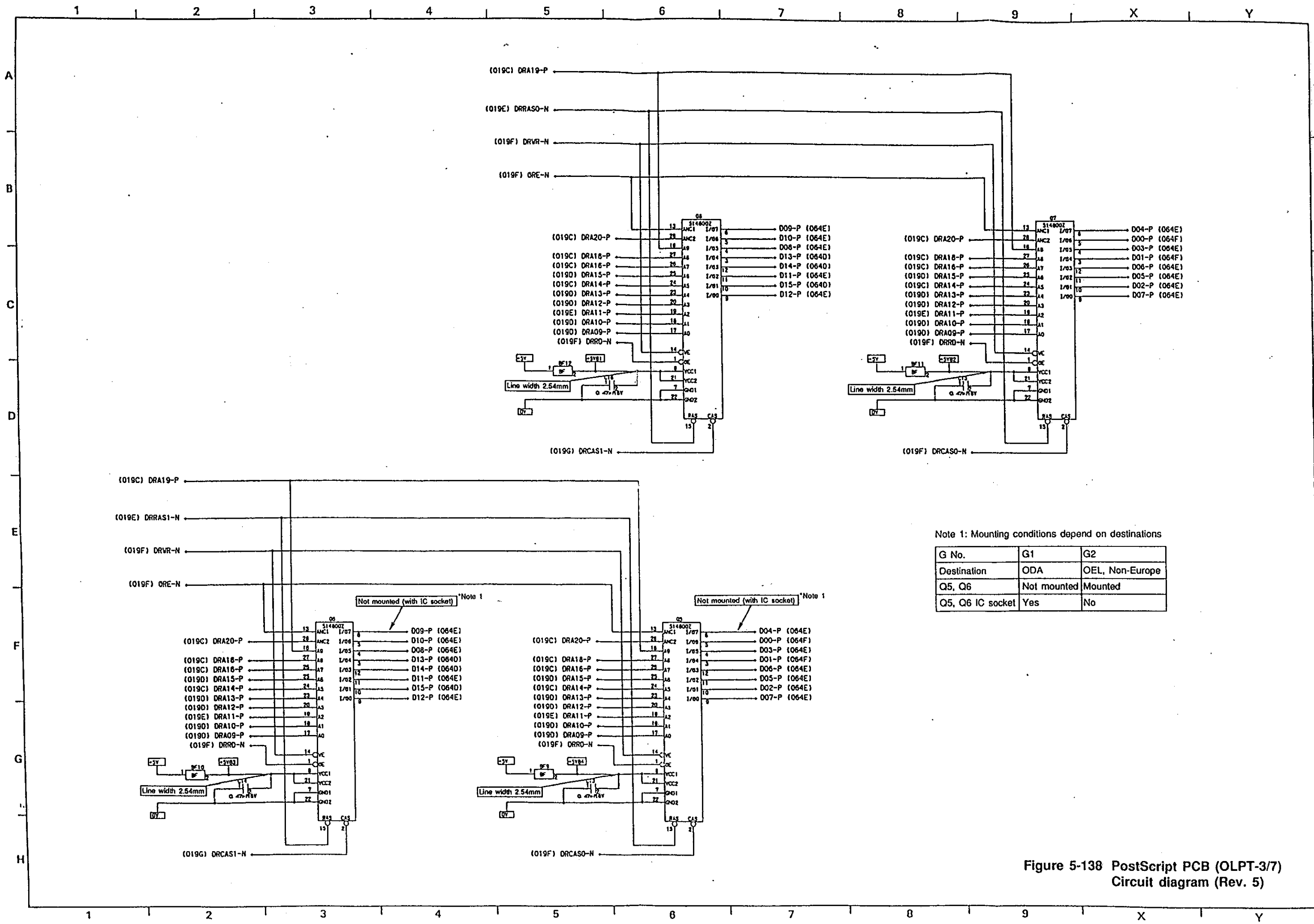


Figure 5-137 PostScript PCB (OLPT-2/7) Circuit diagram (Rev. 5)



Note 1: Mounting conditions depend on destinations

G No.	G1	G2
Destination	ODA	OEL, Non-Europe
Q5, Q6	Not mounted	Mounted
Q5, Q6 IC socket	Yes	No

Figure 5-138 PostScript PCB (OLPT-3/7) Circuit diagram (Rev. 5)

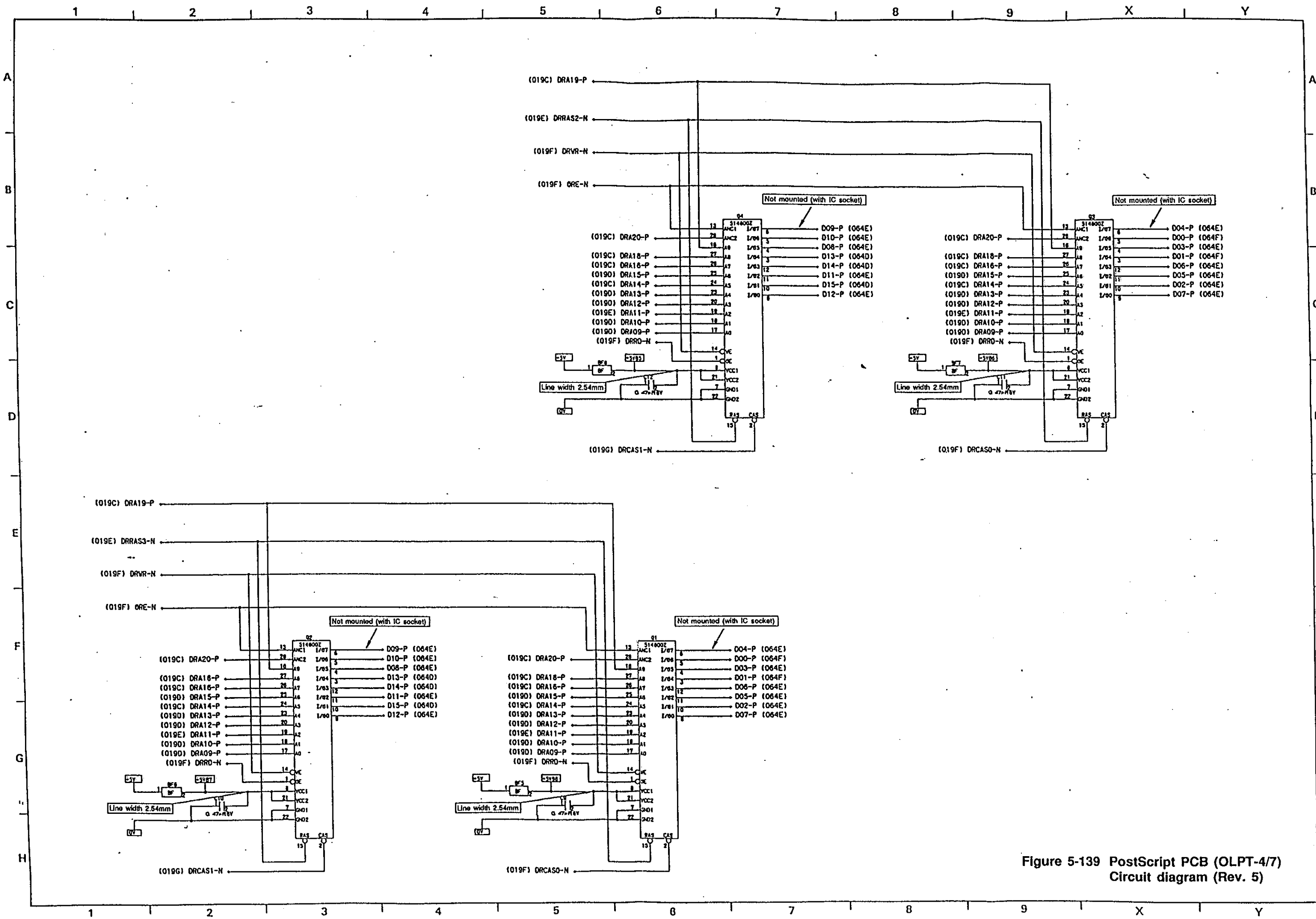


Figure 5-139 PostScript PCB (OLPT-4/7) Circuit diagram (Rev. 5)

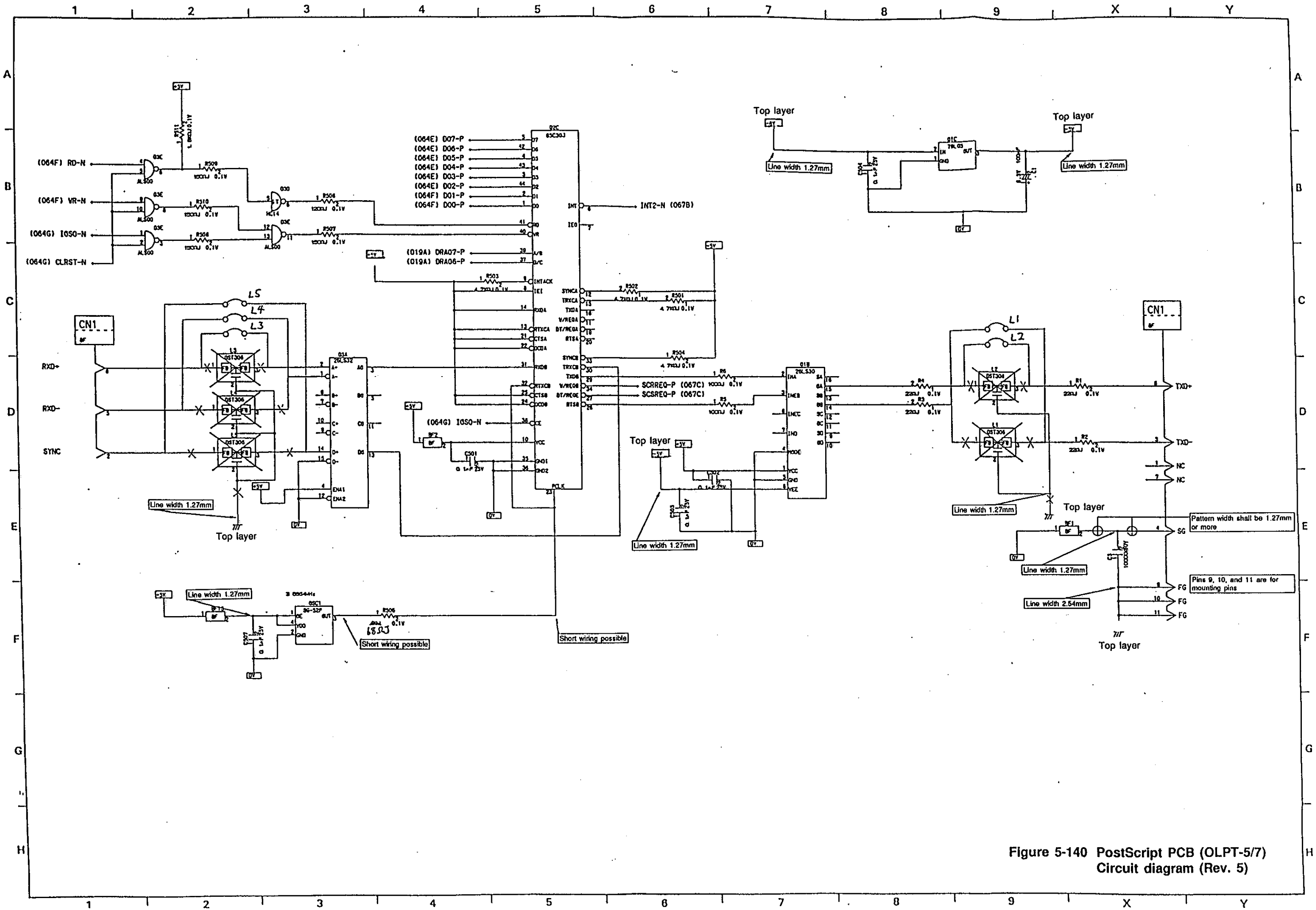


Figure 5-140 PostScript PCB (OLPT-5/7) Circuit diagram (Rev. 5)

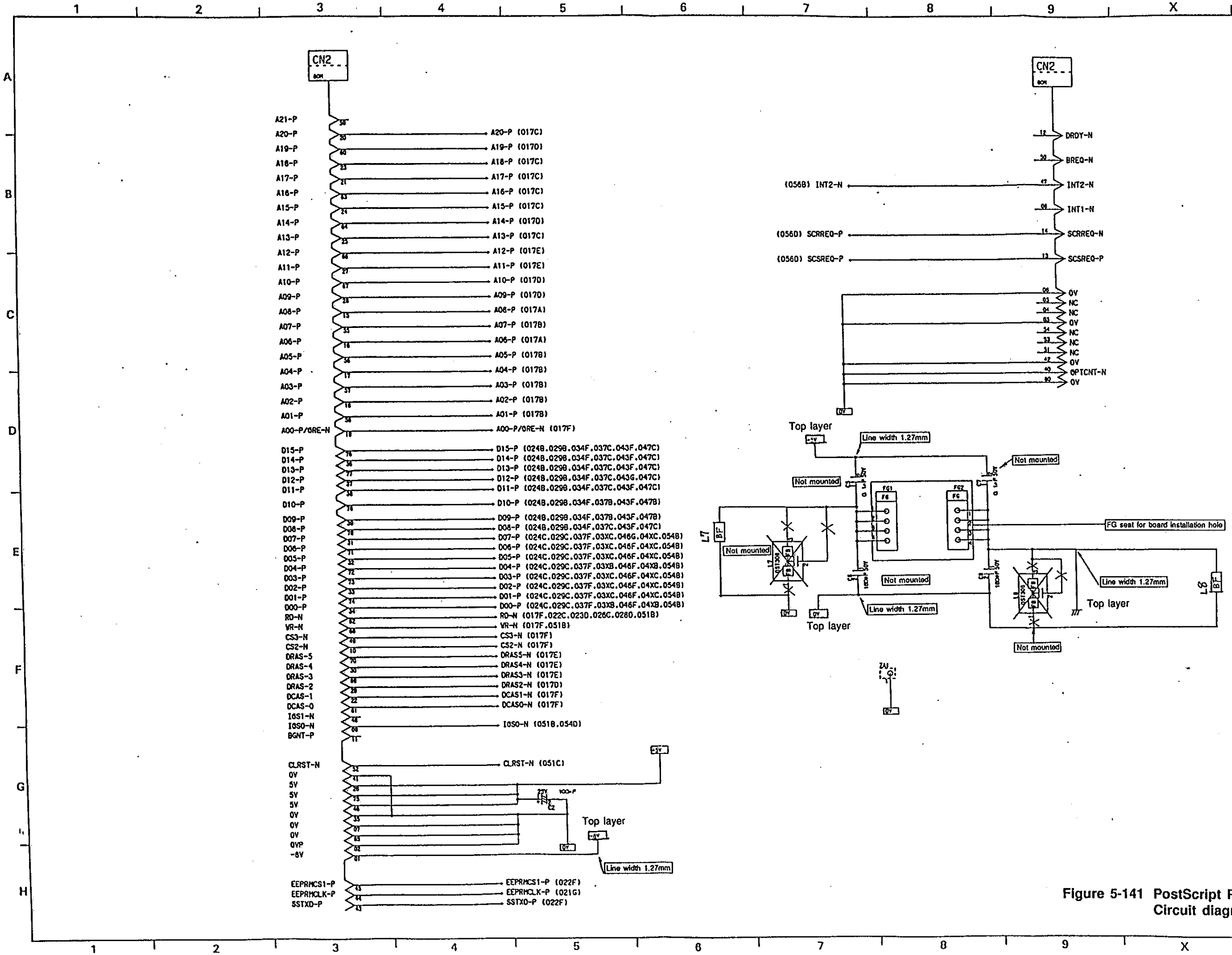


Figure 5-141 PostScript PCB (OLPT-6/7) Circuit diagram (Rev. 5)

Connector Name: 80M
Part Number: 224A3515P0800
Part Symbol: CN2

Pin No.	Signal Name	Location	
01	-8V	063H	
02	OVP	063H	
03	0V	069C	
04	NC	069C	
05	NC	069C	
06	0V	069C	
07	0V	063G	
08	INT1-N	069B	
09	I0S0-N	063G	
10	CS2-N	063F	
11	BGNT-P	063G	
12	DRDY-N	069B	
13	SCSREQ-P	069C	
14	SCRREQ-N	069C	
15	A08-P	063C	
16	A06-P	063C	
17	A04-P	063D	
18	A02-P	063D	
19	A00-P/0RE-N	063D	
20	A20-P	063B	
21	A17-P	063B	
22	DCAS-1	063F	
23	A18-P	063B	
24	A15-P	063B	
25	A13-P	063C	
26	5V	063G	
27	A11-P	063C	
28	A09-P	063C	
29	DRAS-2	063F	
30	DRAS-4	063F	
31	D07-P	063E	
32	D05-P	063E	
33	D02-P	063E	
34	D00-P	063F	
35	0V	063G	
36	D14-P	063D	
37	D12-P	063E	
38	D11-P	063E	
39	D09-P	063E	
40	0PTCNT-N	069D	
41	0V	063G	
42	0V	069D	
43	SSTX0-P	063H	
44	EEPRMCLK-P	063H	
45	EEPRMCS1-P	063H	
46	5V	063G	
47	INT2-N	069B	
48	I0S1-N	063F	
49	CS3-N	063F	
50	BREQ-N	069B	

Pin No.	Signal Name	Location	
51	NC	069D	
52	CLRST-N	063G	
53	NC	069C	
54	NC	069C	
55	A07-P	063C	
56	A05-P	063D	
57	A03-P	063D	
58	A01-P	063D	
59	A21-P	063B	
60	A19-P	063B	
61	DCAS-0	063F	
62	RD-N	063F	
63	A16-P	063B	
64	A14-P	063B	
65	0V	063G	
66	A12-P	063C	
67	A10-P	063C	
68	WR-N	063F	
69	DRAS-3	063F	
70	DRAS-5	063F	
71	D06-P	063E	
72	D04-P	063E	
73	D03-P	063E	
74	D01-P	063F	
75	5V	063G	
76	D15-P	063D	
77	D13-P	063D	
78	D10-P	063E	
79	D08-P	063E	
80	0V	069D	

Connector Name: 8F
Part Number: 224A1780P0080
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	NC	05XD	
2	SYNC	051D	
3	TXD-	05XD	
4	SG	05XE	
5	RXD-	051D	
6	TXD+	05XD	
7	NC	05XE	
8	RXD+	051D	
9	FG	05XE	
10	FG	05XF	
11	FG	05XF	

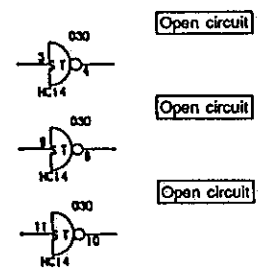


Figure 5-142 PostScript PCB (OLPT-7/7) Circuit diagram (Rev. 5)

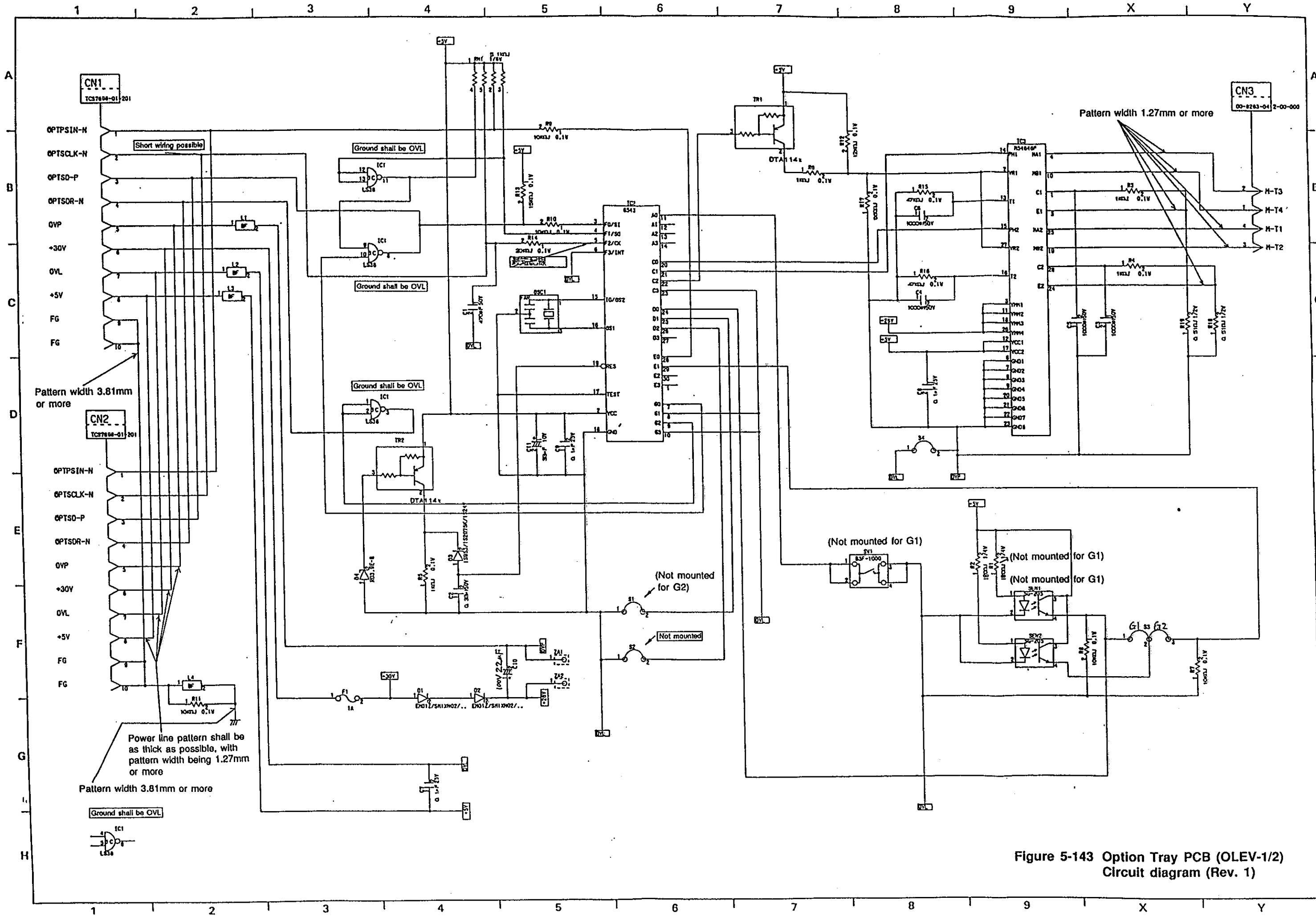


Figure 5-143 Option Tray PCB (OLEV-1/2) Circuit diagram (Rev. 1)

Connector Name: 00-8263-0412-00-000
Part Number: 224A3357P0040
Part Symbol: CN3

Pin No.	Signal Name	Location	
1	M-T4	01YB	
2	M-T3	01YB	
3	M-T2	01YC	
4	M-T1	01YB	

Connector Name: TCS7698-01-201
Part Number: 221A1622P0082
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	OPTPSIN-N	012B	
2	OPTSCLK-N	012B	
3	OPTSD-P	012B	
4	OPTSDR-N	012B	
5	OVP	012B	
6	+30V	012C	
7	OVL	012C	
8	+5V	012C	
9	FG	012C	
10	FG	012C	

Connector Name: TCS7698-01-201
Part Number: 221A1622P0082
Part Symbol: CN2

Pin No.	Signal Name	Location	
1	OPTPSIN-N	012D	
2	OPTSCLK-N	012E	
3	OPTSD-P	012E	
4	OPTSDR-N	012E	
5	OVP	012E	
6	+30V	012E	
7	OVL	012F	
8	+5V	012F	
9	FG	012F	
10	FG	012F	

Figure 5-144 Option Tray PCB (OLEV-2/2) Circuit diagram (Rev. 1)

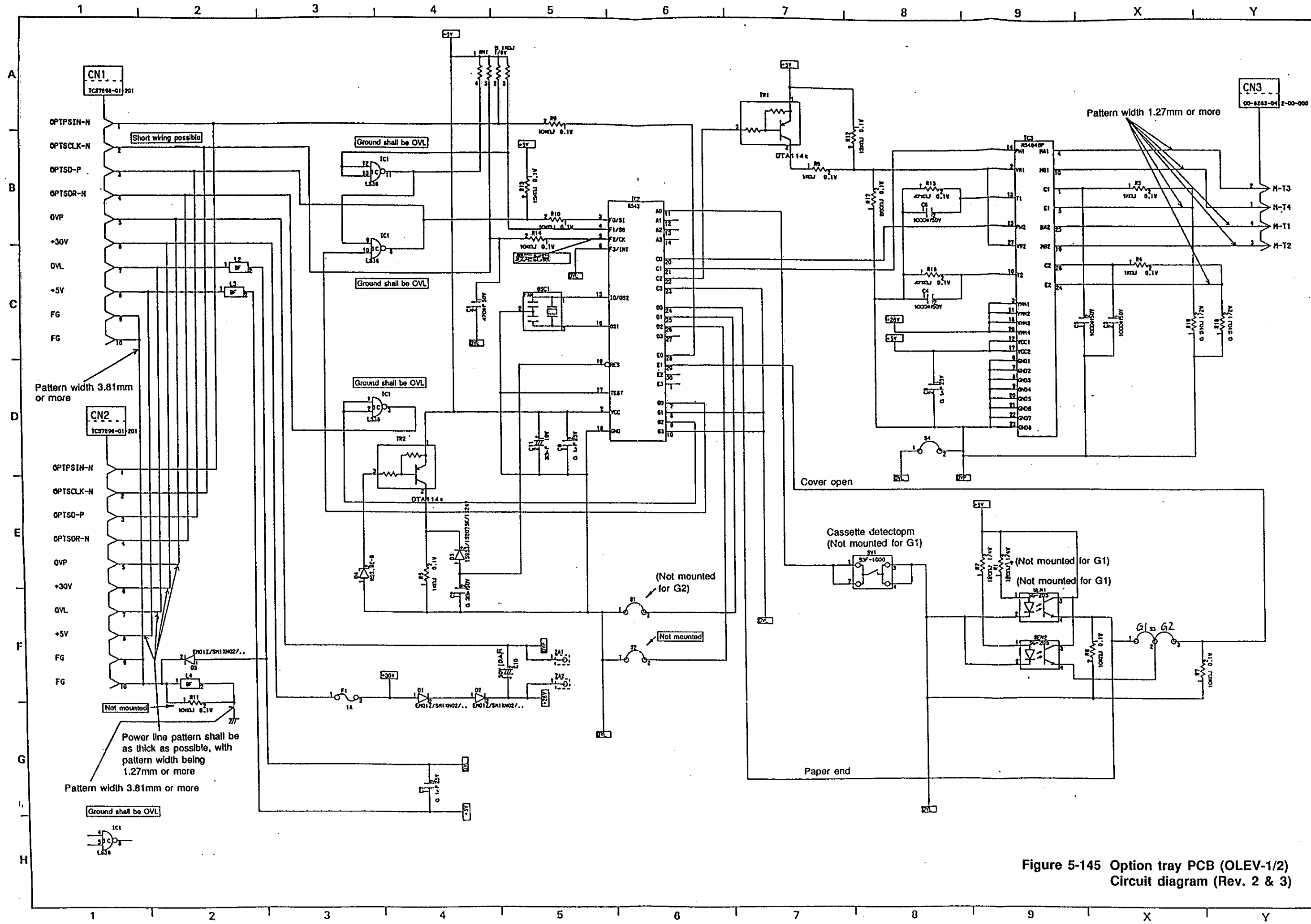


Figure 5-145 Option tray PCB (OLEV-1/2) Circuit diagram (Rev. 2 & 3)

Connector Name: 00-8263-0412-00-000
Part Number: 224A3357P0040
Part Symbol: CN3

Pin No.	Signal Name	Location	
1	M-T4	01YB	
2	M-T3	01YB	
3	M-T2	01YC	
4	M-T1	01YB	

Connector Name: TCS7698-01-201
Part Number: 221A1622P0082
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	0PTPSIN-N	012B	
2	0PTSCLK-N	012B	
3	0PTSD-P	012B	
4	0PTSDR-N	012B	
5	0VP	012B	
6	+30V	012C	
7	0VL	012C	
8	+5V	012C	
9	FG	012C	
10	FG	012C	

Connector Name: TCS7698-01-201
Part Number: 221A1622P0082
Part Symbol: CN2

Pin No.	Signal Name	Location	
1	0PTPSIN-N	012D	
2	0PTSCLK-N	012E	
3	0PTSD-P	012E	
4	0PTSDR-N	012E	
5	0VP	012E	
6	+30V	012E	
7	0VL	012F	
8	+5V	012F	
9	FG	012F	
10	FG	012F	

Figure 5-146 Option tray PCB (OLEV-2/2) Circuit diagram (Rev. 2 & 3)

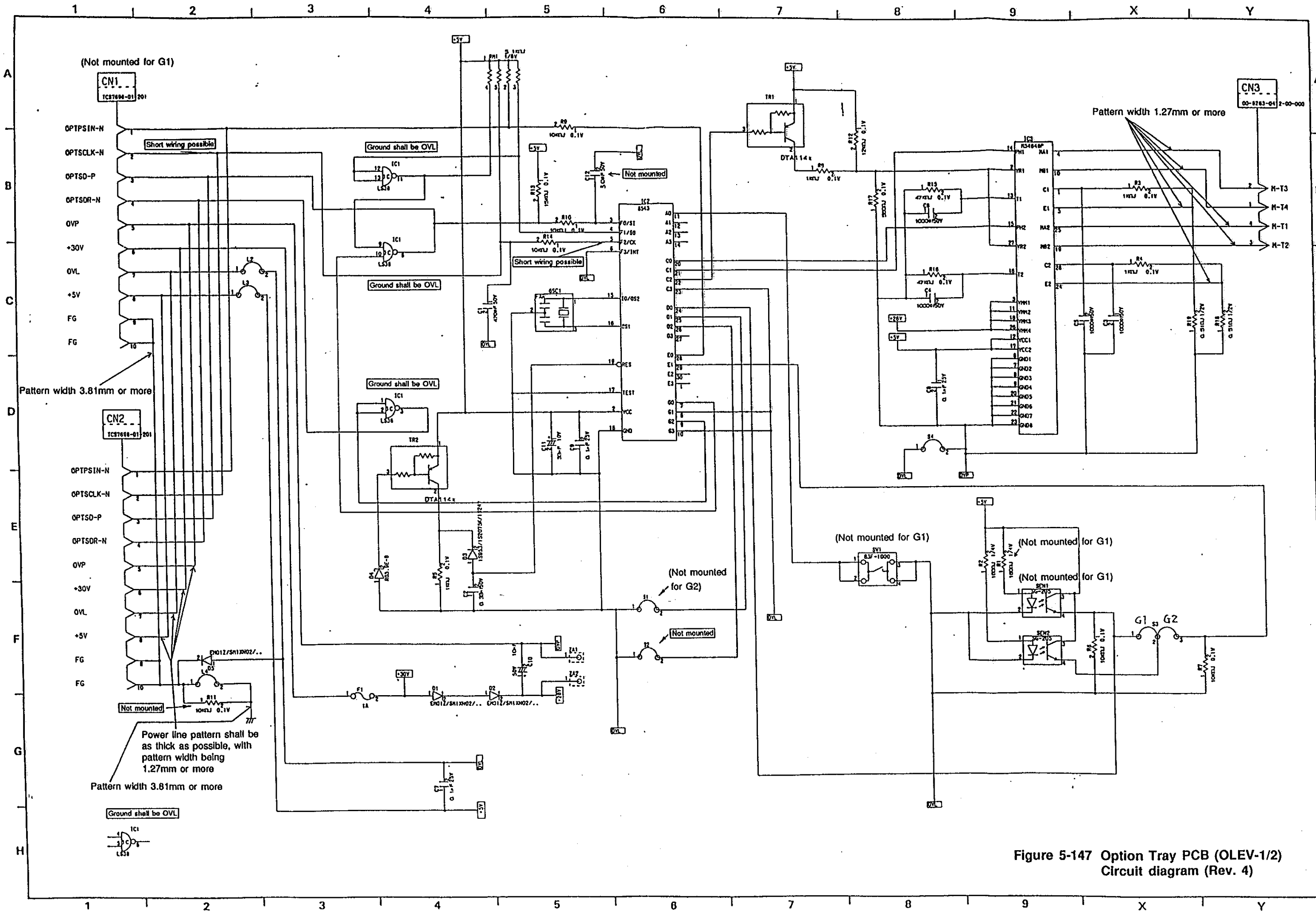


Figure 5-147 Option Tray PCB (OLEV-1/2) Circuit diagram (Rev. 4)

Connector Name: 00-8263-0412-00-000
Part Number: 224A3357P0040
Part Symbol: CN3

Pin No.	Signal Name	Location	
1	M-T4	01YB	
2	M-T3	01YB	
3	M-T2	01YC	
4	M-T1	01YB	

Connector Name: TCS7698-01-201
Part Number: 221A1622P0082
Part Symbol: CN1

Pin No.	Signal Name	Location	
1	OPTPSIN-N	012B	
2	OPTSCLK-N	012B	
3	OPTSD-P	012B	
4	OPTSDR-N	012B	
5	OVP	012B	
6	+30V	012C	
7	OVL	012C	
8	+5V	012C	
9	FG	012C	
10	FG	012C	

Connector Name: TCS7698-01-201
Part Number: 221A1622P0082
Part Symbol: CN2

Pin No.	Signal Name	Location	
1	OPTPSIN-N	012D	
2	OPTSCLK-N	012E	
3	OPTSD-P	012E	
4	OPTSDR-N	012E	
5	OVP	012E	
6	+30V	012E	
7	OVL	012F	
8	+5V	012F	
9	FG	012F	
10	FG	012F	

Figure 5-148 Option Tray PCB (OLEV-2/2) Circuit diagram (Rev. 4)

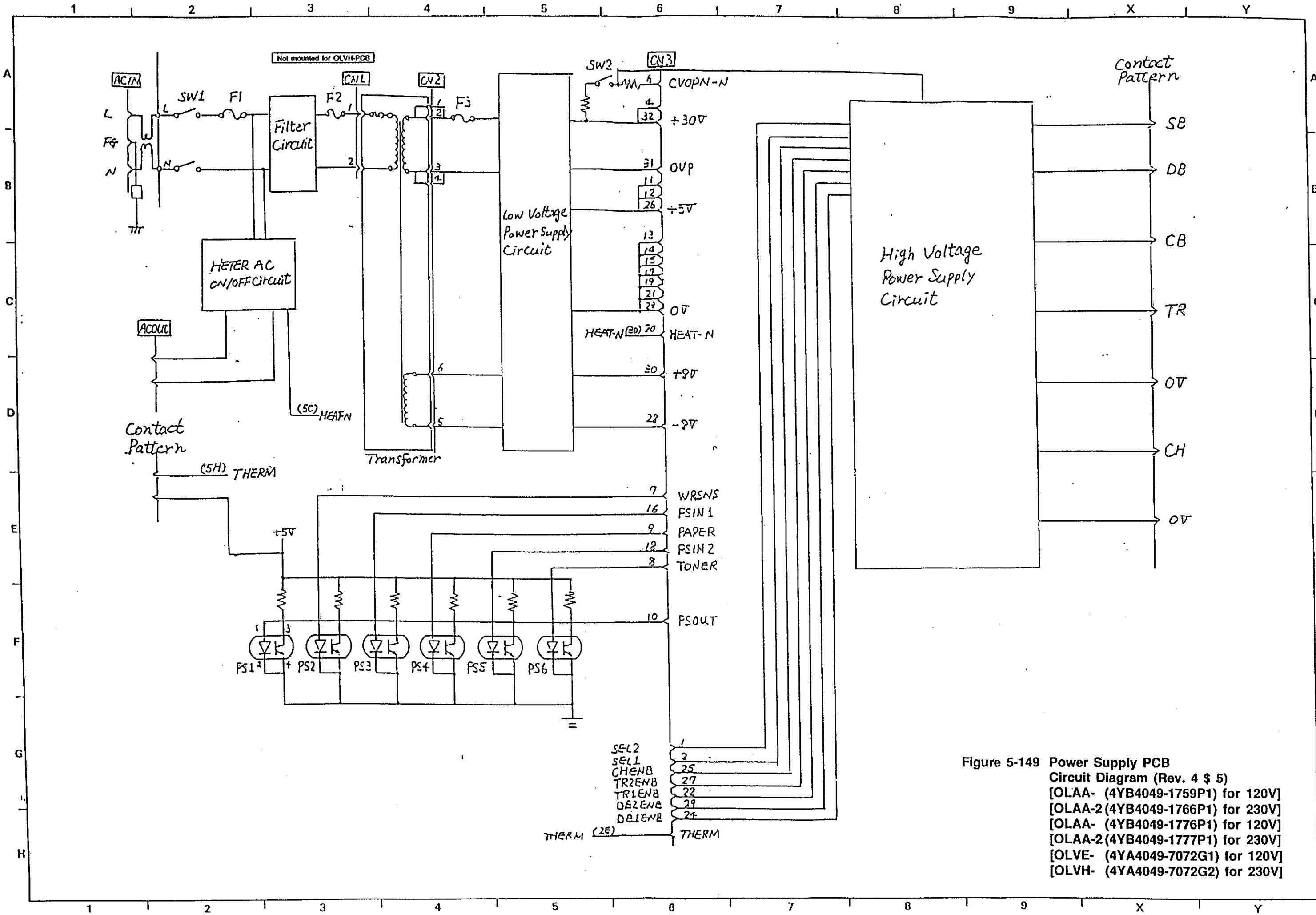


Figure 5-149 Power Supply PCB Circuit Diagram (Rev. 4 $ 5)
[OLAA- (4YB4049-1759P1) for 120V]
[OLAA-2 (4YB4049-1766P1) for 230V]
[OLAA- (4YB4049-1776P1) for 120V]
[OLAA-2 (4YB4049-1777P1) for 230V]
[OLVE- (4YA4049-7072G1) for 120V]
[OLVH- (4YA4049-7072G2) for 230V]

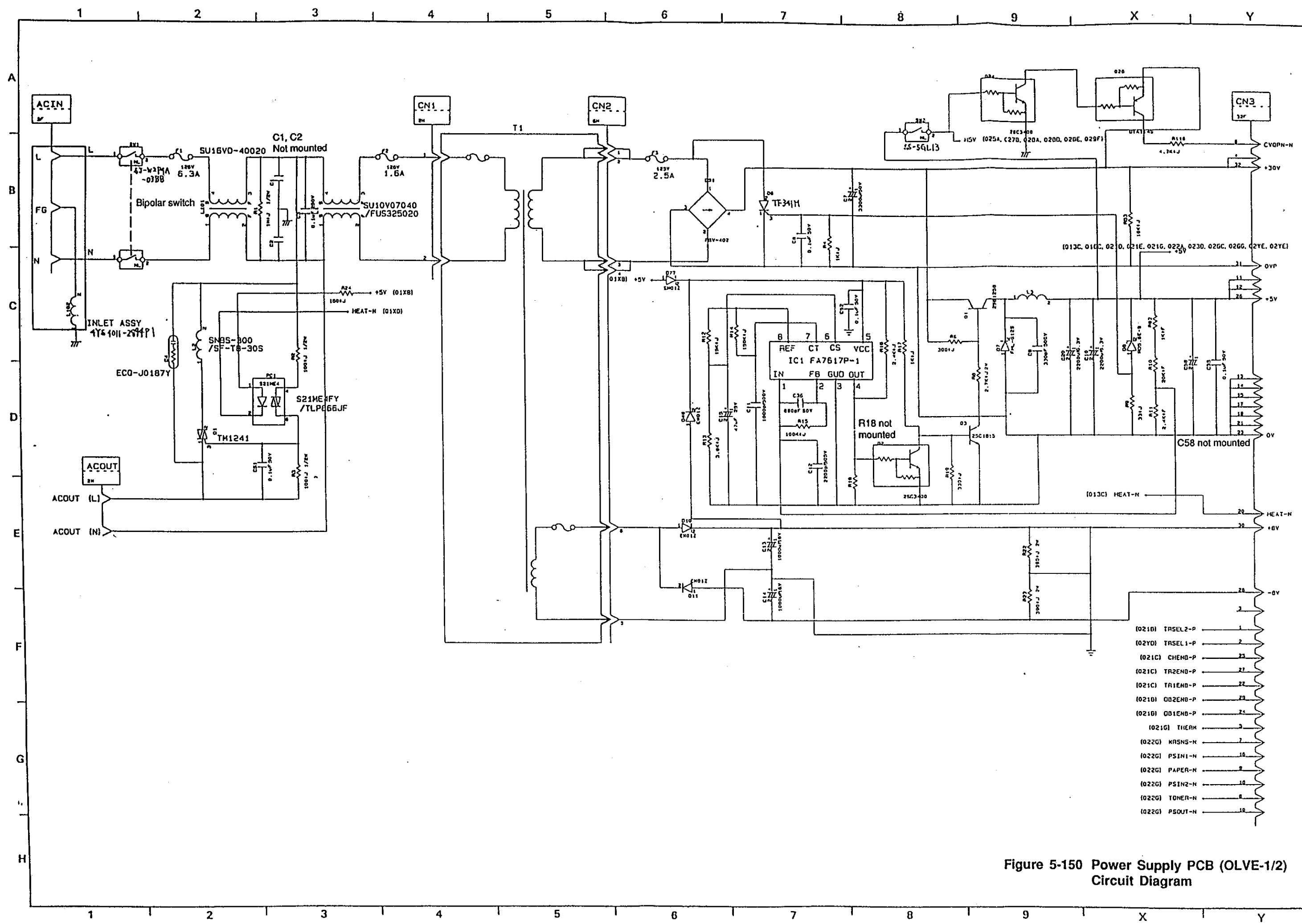


Figure 5-150 Power Supply PCB (OLVE-1/2) Circuit Diagram

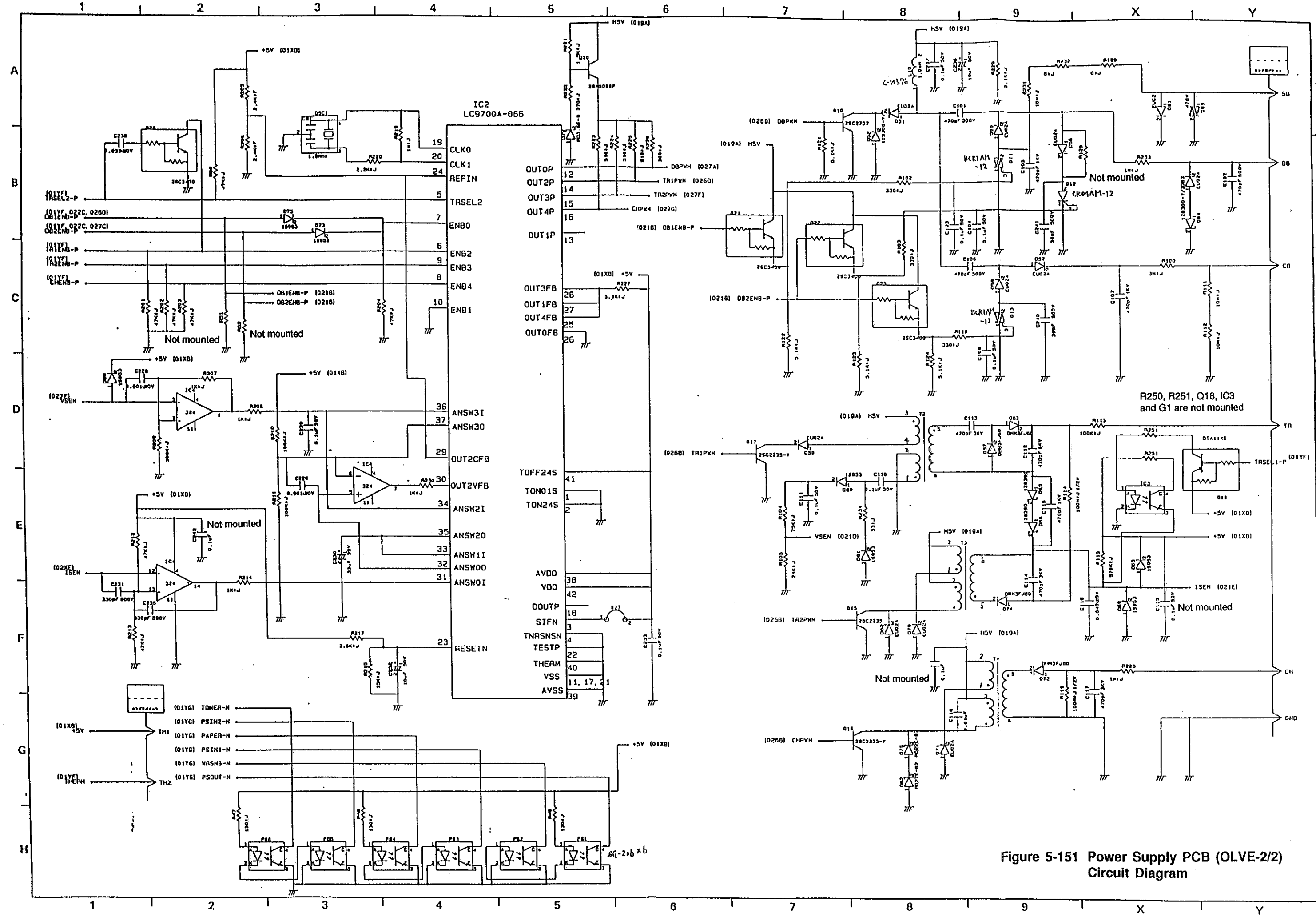


Figure 5-151 Power Supply PCB (OLVE-2/2) Circuit Diagram

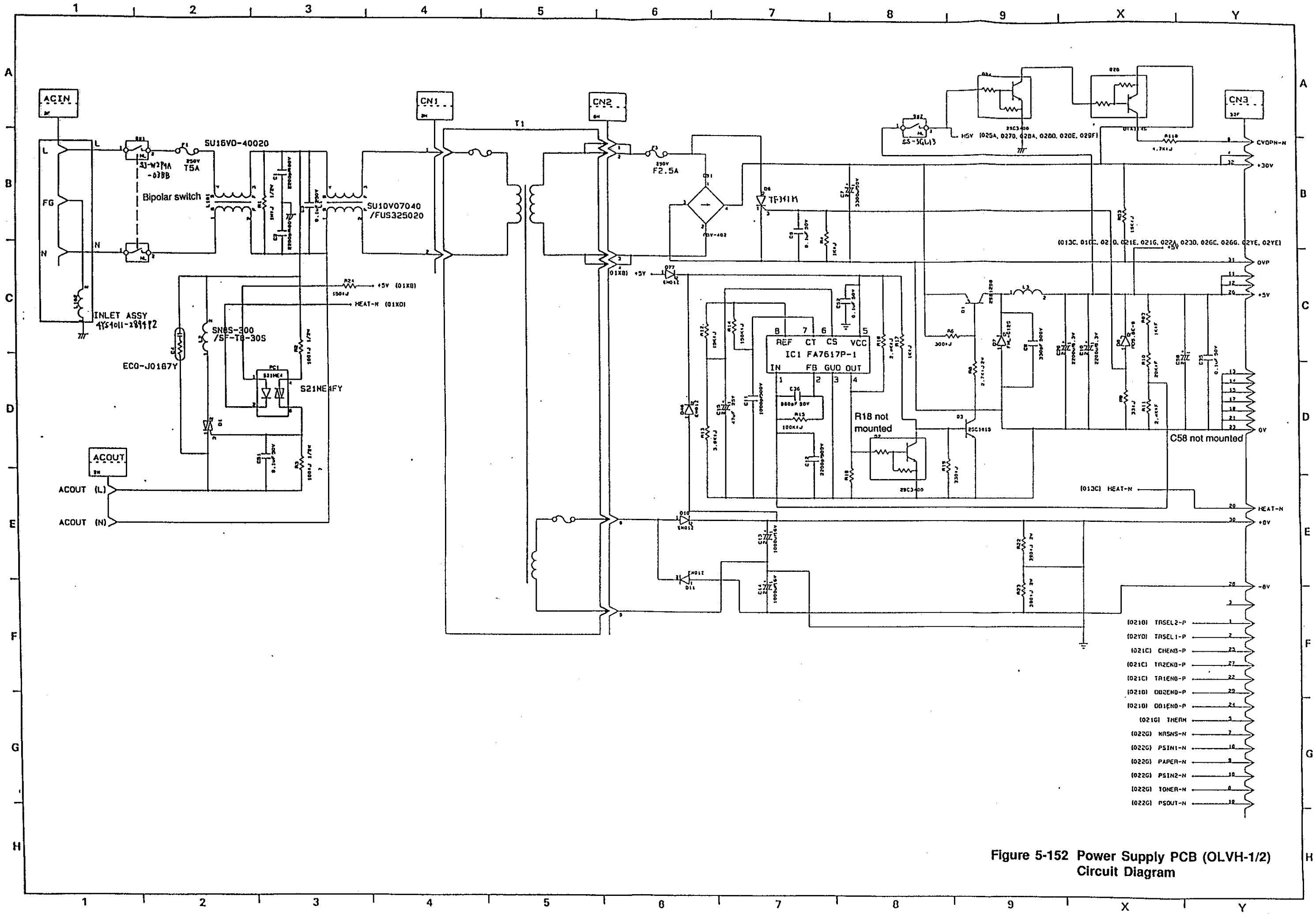


Figure 5-152 Power Supply PCB (OLVH-1/2) Circuit Diagram

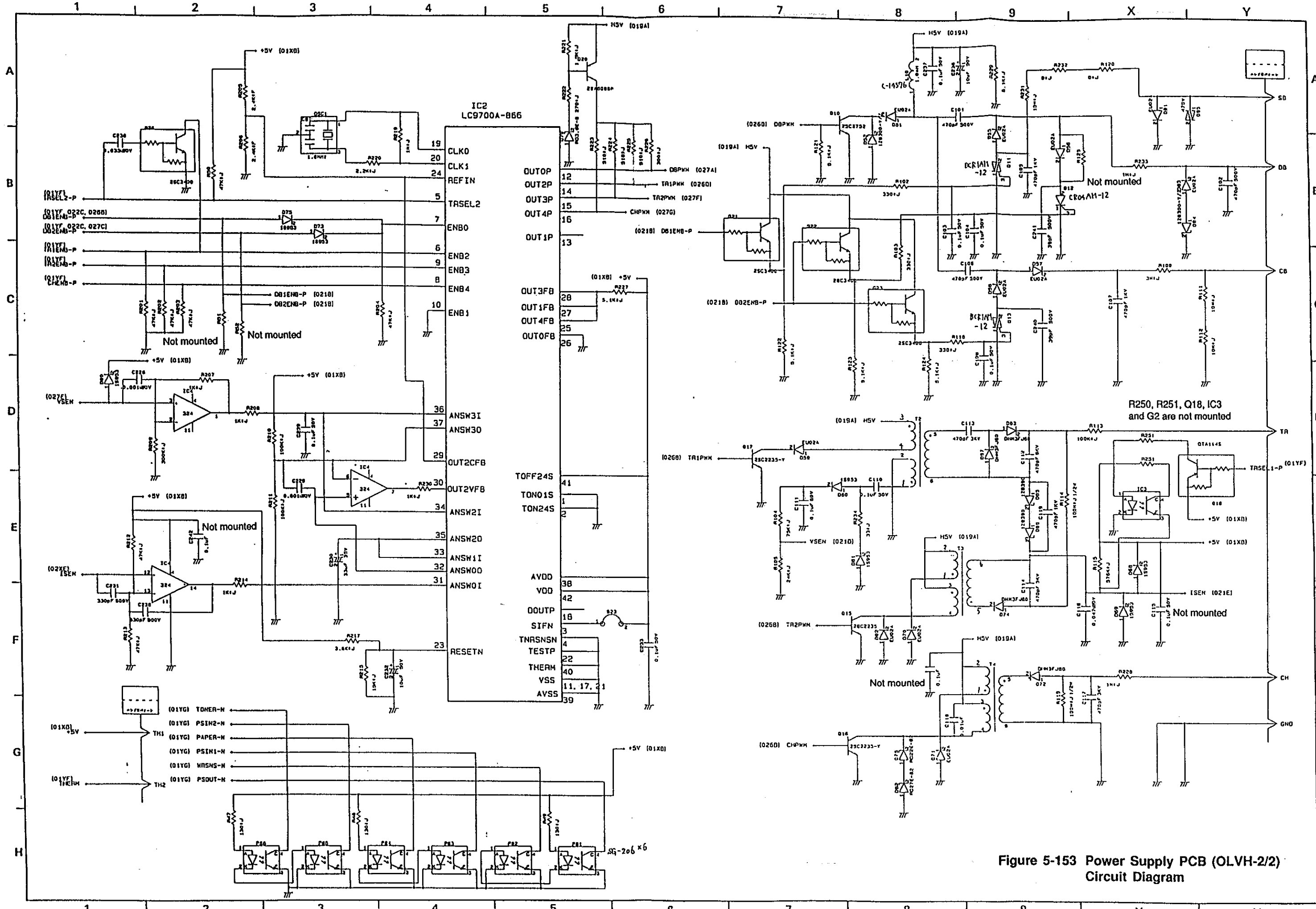
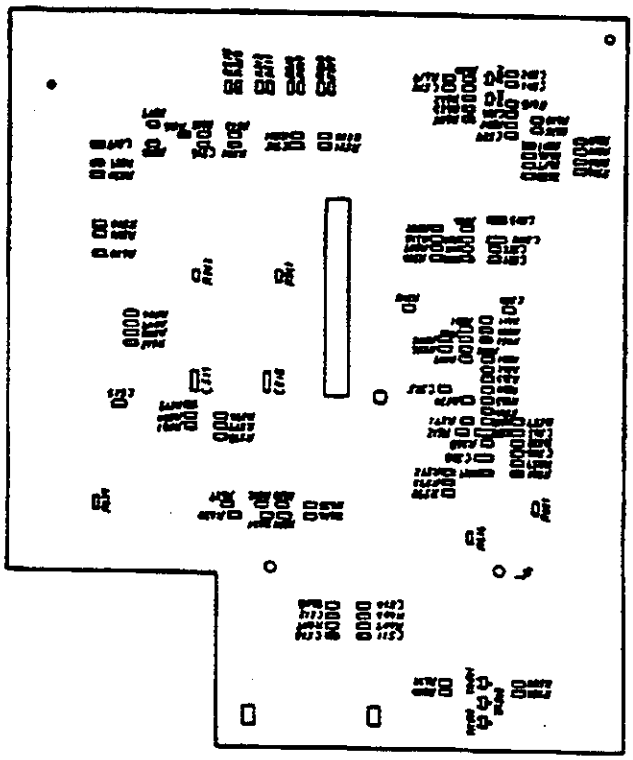


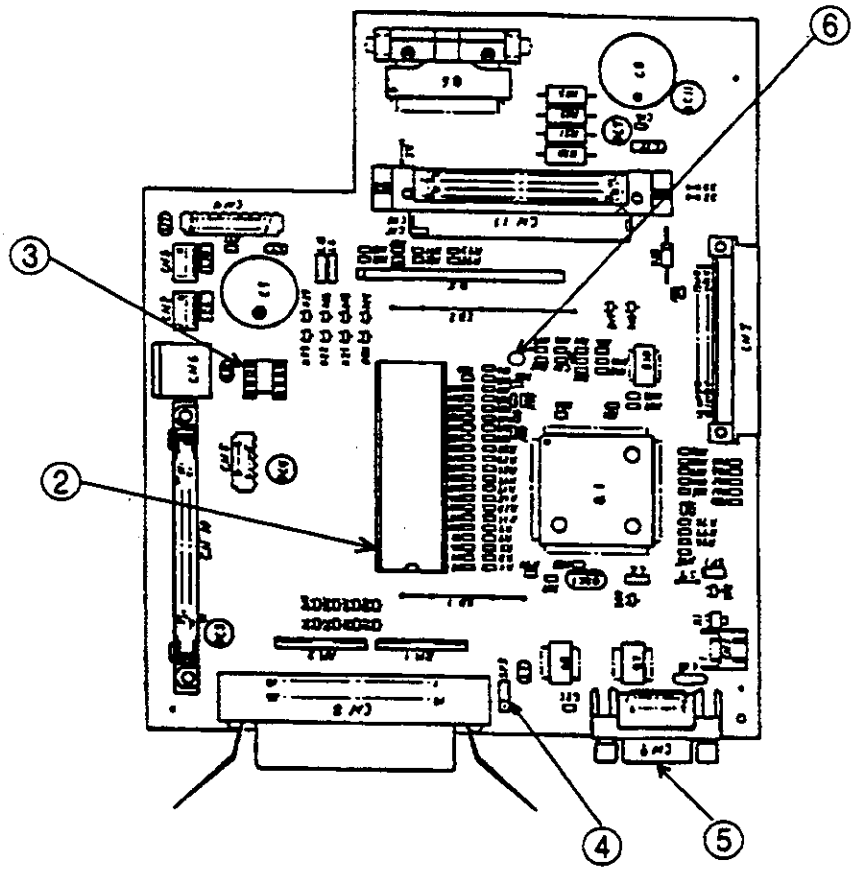
Figure 5-153 Power Supply PCB (OLVH-2/2) Circuit Diagram

COMPONENT PARTS LIST

Drawing List

Main Control Board	(OLCW-PCB, Rev. 3)	OL400e	4YA4121-1007G11
Main Control Board	(OLCW-PCB, Rev. 4)	OL400e	4YA4121-1007G11
Main Control Board	(OLCW-PCB, Rev. 5)	OL400e	4YA4121-1007G11
Main Control Board	(OLCW-PCB, Rev. 6)	OL400e/OL400ex	4YA4121-1007G11
Main Control Board	(OLCW-PCB, Rev. 7)	OL400e/OL400ex	4YA4121-1007G11
Main Control Board	(OLCW-PCB, Rev. 8)	OL400e/OL400ex	4YA4121-1007G11
Main Control Board	(OLCW-3PCB, Rev. 6)	OL410e/OL410ex	4YA4121-1007G13
Main Control Board	(OLCW-3PCB, Rev. 7)	OL410e/OL410ex	4YA4121-1007G13
Main Control Board	(OLCW-3PCB, Rev. 8)	OL410e/OL410ex	4YA4121-1007G13
Operator Panel 1/2	(OLLB-PCB, Rev. 3)		4Y4087-1027G1
Operator Panel 1/2	(OLLB-PCB, Rev. 4)		4Y4087-1027G1
Operator Panel 2/2	(OLLB-PCB, Rev. 4)		4Y4087-1028G1
Operator Panel 2/2	(OLLB-PCB, Rev. 5)		4Y4087-1028G1
Operator Panel	(OLCC-PCB, Rev. 1)		4YA4130-1001G1
Operator Panel	(OLCC-PCB, Rev. 2 through Rev. 4)		4YA4130-1001G1
Option RAM	(OLCB-PCB, Rev. 4)		4YA4121-1002G11
Option RAM	(OLCB-PCB, Rev. 5 & 6)		4YA4121-1002G11
Option RAM	(OLCB-PCB, Rev. 7 Type A)		4YA4121-1002G11
Option RAM	(OLCB-PCB, Rev. 7 Type B)		4YA4121-1002G11
Power Supply Board	(OLAA-PCB, 120V)		4YB4049-1759P1
Power Supply Board	(OLAA-2PCB, 230V)		4YB4049-1766P1
Power Supply Board	(OLAA-PCB, 120V)		4YB4049-1776P1
Power Supply Board	(OLAA-2 PCB, 230V)		4YB4049-1777P1
Power Supply Board	(OLVE-PCB, 120V)		4YA4049-7072G1
Power Supply Board	(OLVH-PCB, 230V)		4YA4049-7072G2





OLCW-Printed Circuit Board (Main Control Board) Rev. 3
(4YA4021-1003G1 - 1/2)

OLCW-Printed Circuit Board (Main Control Board) Rev. 3
(4YA4021-1007G11 - 2/2 - 1/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D30	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D3-D6, D20-D23, D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	9	
5	D10-D13, D19, D24-D27, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	10	
6	D28	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D18	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R559, R573	RM73B2A105F RN Resistor (CP)	323A5003F0105	2	
10	R561	RM73B2A123F RN Resistor (CP)	323A5003F0123	1	
11	R563, R566	RM73B2A132F RN Resistor (CP)	323A5003F0132	2	
12	R568	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
13	R558	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
14	R569	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
15	R562	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
16	R612	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	
17	R557	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	

OLCW-Printed Circuit Board (Main Control Board) Rev. 3
(4YA4021-1007G11 - 2/2 - 2/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R567	RM73B2A751F RN Resistor (CP)	323A5003F0751	1	
19	R521, R552	RM73B2A101J RN Resistor (CP)	323A5003J0101	2	
20	R506, R520, R522-R524, R527, R530, R543, R547	RM73B2A102J RN Resistor (CP)	323A5003J0102	9	
21					
22	R503, R525, R526, R564, R565	RM73B2A103J RN Resistor (CP)	323A5003J0103	5	
23					
24	R571	RM73B2A112J RN Resistor (CP)	323A5003J0112	1	
25	R59	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
26	R1-R25, R54, R533, R534, R550, R616, R625	RM73B2A151J RN Resistor (CP)	323A5003J0151	31	
27					
28	R546	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
29	R85	RM73B2A201J RN Resistor (CP)	323A5003J0201	1	
30	R47, R48, R80, R528, R570, R576-R579, R639-R641	RM73B2A202J RN Resistor (CP)	323A5003J0202	12	
31					
32	R507-R514	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	
33	R26-R41, R45, R49, R535-R540, R548, R551, R553-R556,	RM73B2A241J RN Resistor (CP)	323A5003J0241	31	
34	R611				

OLCW-Printed Circuit Board (Main Control Board) Rev. 3
(4YA4021-1007G11 - 2/2 - 3/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35					
36	R69, R70, R72, R74, R82, R544, R614	RM73B2A272J RN Resistor (CP)	323A5003J0272	7	
37					
38	R609	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
39	R584	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
40	R73, R620-R624, R626-R628	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
41					
42	R75-R79, R501, R502, R574, R581	RM73B2A332J RN Resistor (CP)	323A5003J0332	9	
43					
44	R67, R68	RM73B2A431J RN Resistor (CP)	323A5003J0431	2	
45	R583, R615	RM73B2A471J RN Resistor (CP)	323A5003J0471	2	
46	R42-R44, R46, R529, R532, R541, R542, R545, R560, R613	RM73B2A472J RN Resistor (CP)	323A5003J0472	11	
47					
48					
49	R607	RM73B2A561J RN Resistor (CP)	323A5003J0561	1	
50	R618, R619	RM73B2A562J RN Resistor (CP)	323A5003J0562	2	
51	R572	RM73B2A564J RN Resistor (CP)	323A5003J0564	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52	R61-R66	RM73B2A621J RN Resistor (CP)	323A5003J0621	6	
53	R71, R83, R580, R637	RM73B2A560J RN Resistor (CP)	323A5003J0560	4	
54	R81, R84	RM73B2A681J RN Resistor (CP)	323A5003J0681	2	
55	R606, R608	RM73B2A751J RN Resistor (CP)	323A5003J0751	2	
56	R504, R505	RM73B2A752J RN Resistor (CP)	323A5003J0752	2	
57	R86, R87-R94, R629-R636	2125JPW Chip jumper (CP)	323A5003P0001	17	
58	R50-R53	MSF1/2B5.1ΩJ RS Resistor	324A1001J0519	4	
59					
60	RM1, RM2	MRM-8-332JA Block resistor	334A3268J0332	2	
61					
62	C520-C522	CK2012B1H222K 50V CK Capacitor (CP)	303A6008K3222	3	
63	C515	CC2012SL1H561J 50V CC Capacitor (CP)	303A3007K0561	1	
64	C526	CC2012SL1H681J 50V CC Capacitor (CP)	303A3007K0681	1	
65	C6	CK92F1E155ZS 25V CK Capacitor 1.5µF	303A4117Z2155	1	
66	C18, C525	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	2	
67 68	C10, C16, C501, C502, C505, C506, C510-C514, C516, C517, C523, C524	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	15	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69					
70	C503, C504, C507, C508	CK3216F1C105Z 16V CK Capacitor (CP) 1μF	303A6009Z1105	4	
71	C15, C518, C519	CK3216F1C155Z 16V CK Capacitor (CP)	303A6009Z1155	3	
72	C11	SXE16VB-220 16V CE Capacitor 220μF	304A1034C1221	1	
73	C8	SRC50VB-680 (M) 50V CE Capacitor 680μF	304A1035H1681	1	
74	C4, C7	6.3MS5-100M 6.3V CE Capacitor 100μF	304A1046J0101	2	
75	C3	KME25VB-100 25V CE Capacitor 100μF	304A1115E1101	1	
76	C9	UVS1A332MRA 10V CE Capacitor 3300μF	304A1137A1332	1	
77	L1, L7, L15, L17	ZBF253D-01 Beads filter	377A1115P1309	4	
78	L13	ZJSR5101-222 EMI Filter	342A1011P1222	1	
79	L10	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
80	L16	ZJSC-2R2-101 EMI Filter	342A1012P2101	1	
81	L18	ZBF503D-00 Beads Inductor	353A3004P2001	1	
82	L2, L6	DSS306-OAE222Z EMI Filter	342A1009P2222	2	
83					
84	Q8	SN7407NS BIP Digital IC (SO)	700A0050N0007	1	
85	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	Q7	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
87	Q10	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
88	Q6	ECN1362SP1 BIP Linear IC	720A1821M0005	1	
89	Q5	HM514260ZP-8 MOS-D-RAM	802A0021M2615	1	
90					
91	TR501-TR503	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	3	
92	TR1	2SB1123 PNP-LF-TR (CP)	601A1032N0002	1	
93	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
94					
95	CN9	DELC-J9PAF-20L9 Square-shaped connector	220A1376P0093	1	
96	CN8	57RE-40360-730B-D29A Square-shaped connector	220A1783P0360	1	
97	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
98	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
99	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
100	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	
101	CN4	ZC-014 PC Connector	224A3590P0140	1	
102	CN5	ZC-006 PC Connector	224A3590P0060	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
104	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
105					
106	2	DICF-42CS-E IC Socket	245A1221P0420	1	
107	3	DICF-8CS-E IC Socket	245A1221P0080	1	
108					
109	S2, S3	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	2	
110	S4, S7	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	2	
111					
112	SP1	IMSA9202B-1-02Z013GF PC Connector	224A4082P0020	1	
113	SP3	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
114	4	IMSA-9206H-GF PC Connector	224A4080P0020	1	
115					
116	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
117					
118	EB1	Power supply bar L=30.48	3LH-31313-158	1	
119	EB2	Power supply bar L=45.72	3LH-31313-160	1	

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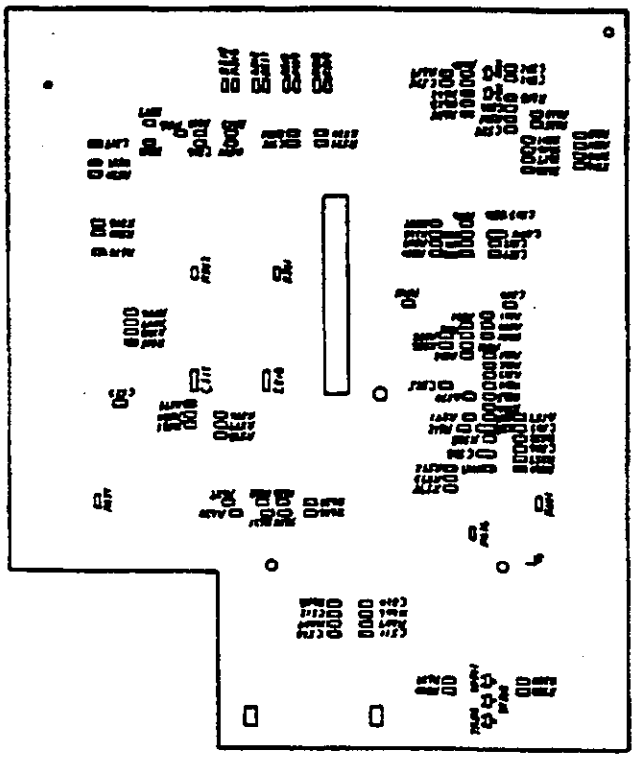
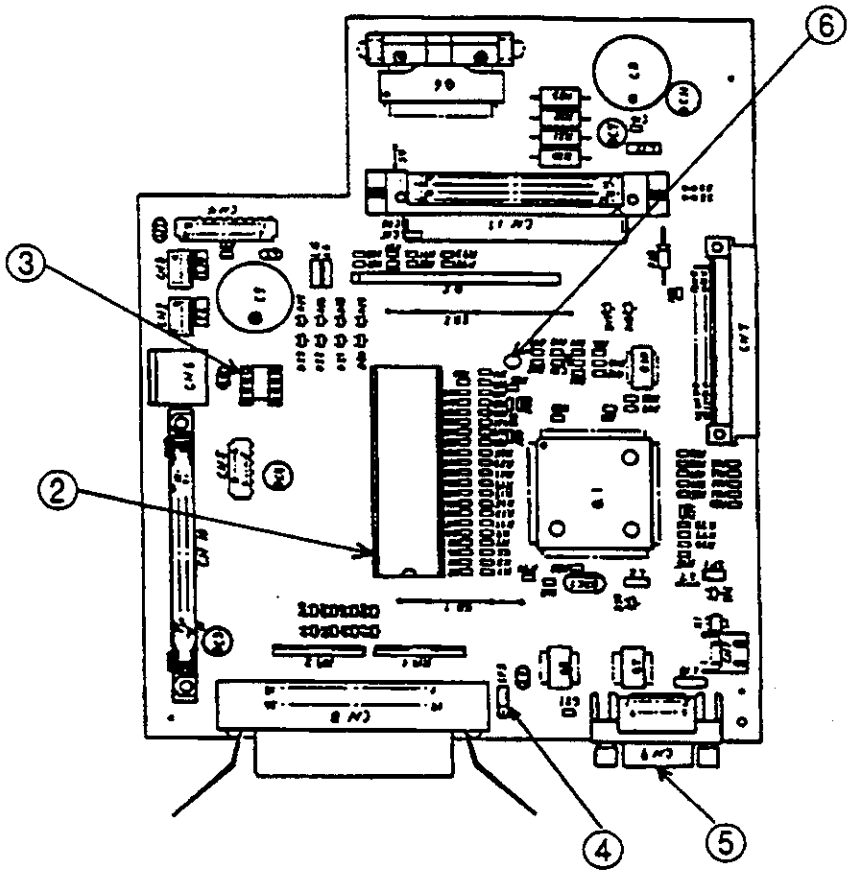
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
120					
121		Special pan-head screw	4LB-181100-2	2	
122		Special pan-head screw (M2.5)	4LB-181200-3	2	
123		Nut	3N3-HH	2	
124		Nut	3N2.5-HH	2	
125	6	MPS-04-0 Card spacer	143A1047P0001	1	
126	5	BP53MB80143024B09 Ferrite core	105A1072C1009	1	





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OLCW-Printed Circuit Board (Main Control Board) Rev. 4
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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D30	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D3-D6, D20-D23, D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	9	
5	D10-D13, D19, D24-D27, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	10	
6	D28	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D18	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R559, R573	RM73B2A105F RN Resistor (CP)	323A5003F0105	2	
10	R561	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
11	R566	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
12	R563	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
13	R568	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
14	R558	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
15	R569	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
16	R562	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R612	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

OLCW-Printed Circuit Board (Main Control Board) Rev. 4
(4YA4021-1007G11 - 2/2 - 2/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R557	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R567	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
20	R521, R552	RM73B2A101J RN Resistor (CP)	323A5003J0101	2	
21	R506, R520, R522-R524, R527, R530, R543, R547	RM73B2A102J RN Resistor (CP)	323A5003J0102	9	
22					
23	R503, R525, R526, R564, R565	RM73B2A103J RN Resistor (CP)	323A5003J0103	5	
24					
25	R571, R614	RM73B2A112J RN Resistor (CP)	323A5003J0112	2	
26	R59	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
27	R1-R25, R54, R533, R534, R550, R616, R625	RM73B2A151J RN Resistor (CP)	323A5003J0151	31	
28					
29	R546	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
30	R608	RM73B2A182J RN Resistor (CP)	323A5003J0182	1	
31	R85	RM73B2A201J RN Resistor (CP)	323A5003J0201	1	
32	R47, R48, R80, R528, R570, R576-R579, R639-R641	RM73B2A202J RN Resistor (CP)	323A5003J0202	12	
33					
34	R507-R514	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R26-R41, R45, R49, R535-R540, R548, R551, R553-R556,	RM73B2A241J RN Resistor (CP)	323A5003J0241	32	
36	R611, R583				
37					
38	R69, R70, R72, R74, R82, R544	RM73B2A272J RN Resistor (CP)	323A5003J0272	6	
39					
40	R609	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
41	R606	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
42	R73, R620-R624, R626-R628	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
43					
44	R75-R79, R501, R502, R574, R581	RM73B2A332J RN Resistor (CP)	323A5003J0332	9	
45					
46	R67, R68, R584	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
47	R615	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
48	R42-R44, R46, R529, R532, R541, R542, R545, R560,	RM73B2A472J RN Resistor (CP)	323A5003J0472	11	
49	R613				
50					
51	R607	RM73B2A561J RN Resistor (CP)	323A5003J0561	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52	R618, R619	RM73B2A562J RN Resistor (CP)	323A5003J0562	2	
53	R572	RM73B2A564J RN Resistor (CP)	323A5003J0564	1	
54	R61-R66	RM73B2A621J RN Resistor (CP)	323A5003J0621	6	
55	R71, R83, R580, R637	RM73B2A560J RN Resistor (CP)	323A5003J0560	4	
56	R81, R84	RM73B2A681J RN Resistor (CP)	323A5003J0681	2	
57	R504, R505	RM73B2A752J RN Resistor (CP)	323A5003J0752	2	
58	R86, R87-R94, R629-R636	2125JPW Chip jumper (CP)	323A5003P0001	17	
59	R50-R53	MSF1/2B2ΩJ RS Resistor	324A1001J0209	4	
60					
61	RM1, RM2	MRM-8-332JA Block resistor	334A3268J0332	2	
62					
63	C520-C522	CK2012B1H222K 50V CK Capacitor (CP)	303A6008K3222	3	
64	C515	CC2012SL1H561J 50V CC Capacitor (CP)	303A3007K0561	1	
65	C526	CC2012SL1H681J 50V CC Capacitor (CP)	303A3007K0681	1	
66	C6	CK92F1E155ZS 25V CK Capacitor 1.5μF	303A4117Z2155	1	
67	C18, C525, C21	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	3	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
68 69 70	C10, C16, C501, C502, C505, C506, C510-C514, C516, C517, C523, C524	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	15	
71	C503, C504, C507, C508	CK3216F1C105Z 16V CK Capacitor (CP) 1μF	303A6009Z1105	4	
72	C15, C518, C519	CK3216F1C155Z 16V CK Capacitor (CP)	303A6009Z1155	3	
73	C11	SXE16VB-220 16V CE Capacitor 220μF	304A1034C1221	1	
74	C8	SRC50VB-680 (M) 50V CE Capacitor 680μF	304A1035H1681	1	
75	C4, C7	6.3MS5-100M 6.3V CE Capacitor 100μF	304A1046J0101	2	
76	C3	KME25VB-100 25V CE Capacitor 100μF	304A1115E1101	1	
77	C9	UVS1A332MRA 10V CE Capacitor 3300μF	304A1137A1332	1	
78	L1, L7, L15, L17	ZBF253D-01 Beads Filter	377A1115P1309	4	
79	L13	ZJSR5101-222 EMI Filter	342A1011P1222	1	
80	L10	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
81	L16	ZJSC-2R2-101 EMI Filter	342A1012P2101	1	
82	L18	ZBF503D-00 Beads inductor	353A3004P2001	1	
83 84	L2, L6	DSS306-OAE222Z EMI Filter	342A1009P2222	2	

OLCW-Printed Circuit Board (Main Control Board) Rev. 4
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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
85	Q8	SN7407NS BIP Digital IC (SO)	700A0050N0007	1	
86	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	
87	Q7	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
88	Q10	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
89	Q6	ECN1362SP1 BIP Linear IC	720A1821M0005	1	
90	Q5	HM514260ZP-8 MOS-D-RAM	802A0021M2615	1	
91					
92	TR501-TR503	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	3	
93	TR1	2SB1123 PNP-LF-TR (CP)	601A1032N0002	1	
94	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
95					
96	CN9	DELC-J9PAF-20L9 Square-shaped connector	220A1376P0093	1	
97	CN8	57RE-40360-730B-D29A Square-shaped connector	220A1783P0360	1	
98	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
99	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
100	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
101	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
102	CN4	ZC-014 PC Connector	224A3590P0140	1	
103	CN5	ZC-006 PC Connector	224A3590P0060	1	
104	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
105	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
106					
107	2	DICF-42CS-E IC Socket	245A1221P0420	1	
108	3	DICF-8CS-E IC Socket	245A1221P0080	1	
109					
110	S2, S3	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	2	
111	S4, S7	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	2	
112					
113	SP1	IMSA9202B-1-02Z013GF PC Connector	224A4082P0020	1	
114	SP3	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
115	4	IMSA-9206H-GF PC Connector	224A4080P0020	1	
116					
117	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
118					

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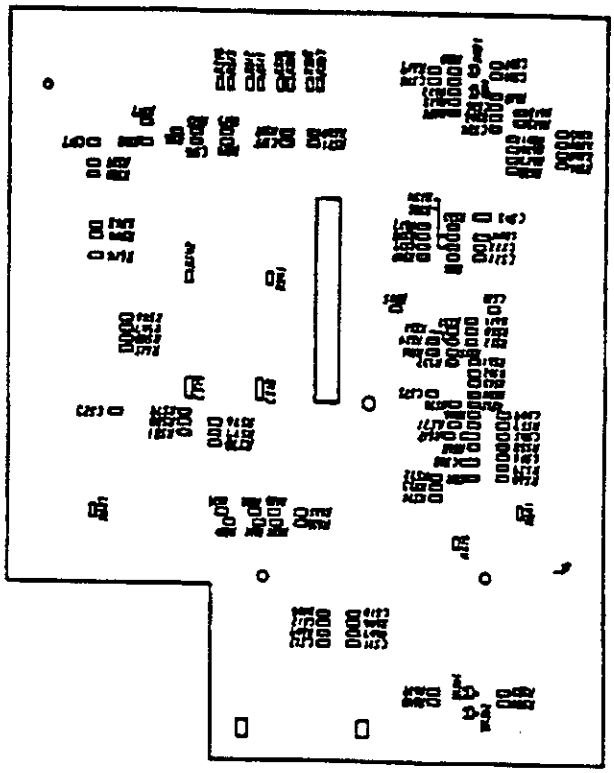
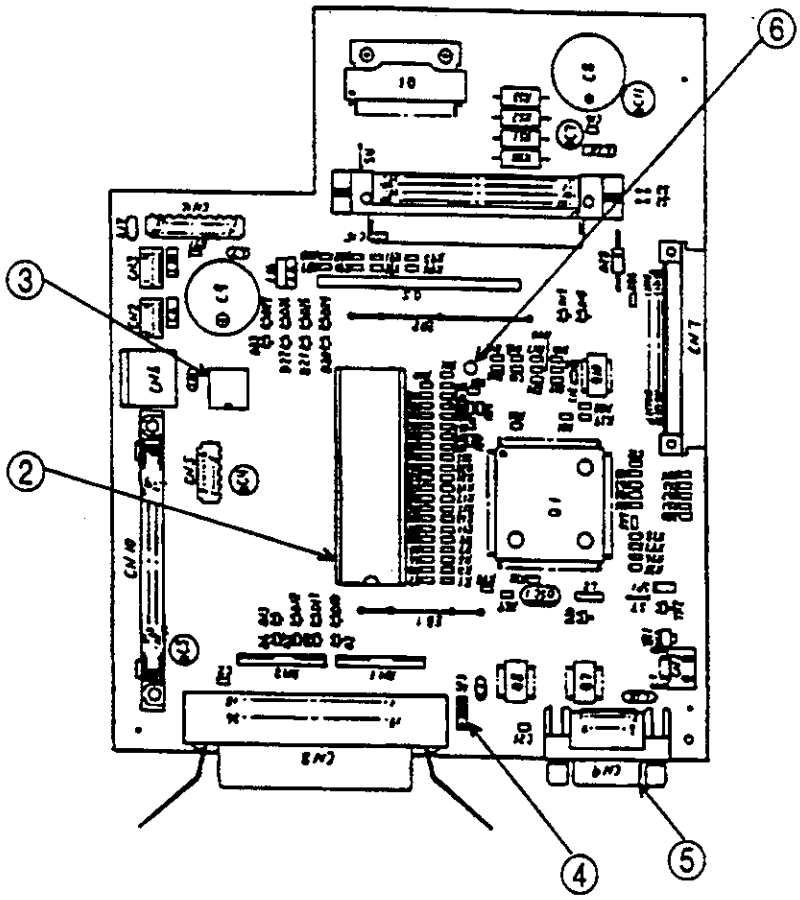
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
119	EB1	Power supply bar L=30.48	3LH-31313-158	1	
120	EB2	Power supply bar L=45.72	3LH-31313-160	1	
121					
122		Special pan-head screw	4LB-181100-2	2	
123		Special pan-head screw (M2.5)	4LB-181200-3	2	
124		Nut	3N3-HH	2	
125		Nut	3N2.5-HH	2	
126	6	MPS-04-0 Card spacer	143A1047P0001	1	
127	5	MB09HA24D Ferrite core	105A1072C1009	1	





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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D30	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D3-D6, D20-D23, D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	9	
5	D10-D13, D19, D24-D27, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	10	
6	D28	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D18	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R573	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	
10	R561	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
11	R566	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
12	R563	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
13	R568	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
14	R558	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
15	R569	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
16	R562	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R612	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R557	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R567	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
20	R521, R552, R83, R637	RM73B2A101J RN Resistor (CP)	323A5003J0101	4	
21	R506, R520, R522-R524, R527, R530, R543, R547	RM73B2A102J RN Resistor (CP)	323A5003J0102	9	
22					
23	R503, R525, R526, R564, R565	RM73B2A103J RN Resistor (CP)	323A5003J0103	5	
24					
25	R571, R614	RM73B2A112J RN Resistor (CP)	323A5003J0112	2	
26	R59	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
27	R1-R25, R54, R533, R534, R550, R616, R625	RM73B2A151J RN Resistor (CP)	323A5003J0151	31	
28					
29	R546	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
30	R608	RM73B2A182J RN Resistor (CP)	323A5003J0182	1	
31	R85, R26-R41	RM73B2A201J RN Resistor (CP)	323A5003J0201	17	
32	R47, R48, R80, R528, R570, R576-R579, R639-R641	RM73B2A202J RN Resistor (CP)	323A5003J0202	12	
33					
34	R507-R514	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R559	RM73B2A225J RN Resistor (CP)	323A5003J0225	1	
36	R45, R49, R535-R540, R548, R551, R553-R556, R583,	RM73B2A241J RN Resistor (CP)	323A5003J0241	16	
37	R611				
38					
39	R69, R70, R72, R74, R82, R544	RM73B2A272J RN Resistor (CP)	323A5003J0272	6	
40					
41	R609	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
42	R606	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
43	R73, R620-R624, R626-R628	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
44					
45	R75-R79, R501, R502, R574	RM73B2A332J RN Resistor (CP)	323A5003J0332	8	
46					
47	R67, R68, R584	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
48	R615	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
49	R42-R44, R46, R529, R532, R541, R542, R545, R560, R613	RM73B2A472J RN Resistor (CP)	323A5003J0472	11	
50					
51					

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REF. NO.	SYMBOL	TYPE/NAME		PART NO.	Q'TY	REMARKS
52	R581, R607	RM73B2A561J RN Resistor (CP)		323A5003J0561	2	
53	R618, R619	RM73B2A562J RN Resistor (CP)		323A5003J0562	2	
54	R572	RM73B2A564J RN Resistor (CP)		323A5003J0564	1	
55	R61-R66	RM73B2A621J RN Resistor (CP)		323A5003J0621	6	
56	R71, R580	RM73B2A560J RN Resistor (CP)		323A5003J0560	2	
57	R81, R84	RM73B2A681J RN Resistor (CP)		323A5003J0681	2	
58	R504, R505	RM73B2A752J RN Resistor (CP)		323A5003J0752	2	
59	R86-R94, R629-R636	2125JPW Chip jumper (CP)		323A5003P0001	17	
60	R50-R53	MSF1/2B2ΩJ RS Resistor		324A1001J0209	4	
61						
62	RM1, RM2	MRM-8-332JA Block resistor		334A3268J0332	2	
63						
64	C515	CC2012SL1H561J CC Capacitor (CP)	50V	303A3007K0561	1	
65	C526	CC2012SL1H681J CC Capacitor (CP)	50V	303A3007K0681	1	
66	C6	CK92F1E155ZS CK Capacitor	25V 1.5μF	303A4117Z2155	1	
67	C2, C18, C21, C525	CK2012B1H102K CK Capacitor (CP)	50V	303A6008K3102	4	
68	C520-C522	CK2012B1H222K CK Capacitor (CP)	50V	303A6008K3222	3	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69 70 71	C10, C12, C16, C501, C502, C505, C506, C509-C514, C516, C517, C523, C524	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	17	
72	C503, C504, C507, C508	CK3216F1C105Z 16V CK Capacitor (CP) 1μF	303A6009Z1105	4	
73	C15, C518, C519	CK3216F1C155Z 16V CK Capacitor (CP)	303A6009Z1155	3	
74	C11	SXE16VB-220 16V CE Capacitor 220μF	304A1034C1221	1	
75	C8	SRC50VB-680 (M) 50V CE Capacitor 680μF	304A1035H1681	1	
76	C3	KME25VB-100 25V CE Capacitor 100μF	304A1115E1101	1	
77	C4, C7	6.3MS5-100M 6.3V CE Capacitor 100μF	304A1046J0101	2	
78 79	C9	UVS1A332MRA 10V CE Capacitor 3300μF	304A1137A1332	1	
80	L1, L7, L15, L17	ZBF253D-01 Beads filter	377A1115P1309	4	
81	L2, L6	DSS306-OAE222Z EMI Filter	342A1009P2222	2	
82	L13	ZJSR5101-222 EMI Filter	342A1011P1222	1	
83	L18	ZBF503D-00 Beads inductor	353A3004P2001	1	
84	L10	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
85	L16	ZJSC-2R2-101 EMI Filter	342A1012P2101	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86					
87	Q8	SN7407NS BIP Digital IC (SO)	700A0050N0007	1	
88	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	
89	Q7	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
90	Q10	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
91	Q6	ECN1362SP1 BIP Linear IC	720A1821M0005	1	
92	Q5	HM514260ZP-8 MOS-D-RAM	802A0021M2615	1	
93					
94	TR501, TR502	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	2	
95	TR1	2SB1123 PNP-LF-TR (CP)	601A1032N0002	1	
96	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
97					
98	CN9	DELC-J9PAF-20L9 Square-shaped connector	220A1376P0093	1	
99	CN8	57RE-40360-730B-D29A Square-shaped connector	220A1783P0360	1	
100	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
101	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
102	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	
104	CN4	ZC-014 PC Connector	224A3590P0140	1	
105	CN5	ZC-006 PC Connector	224A3590P0060	1	
106	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
107	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
108					
109	2	DICF-42CS-E IC Socket	245A1221P0420	1	
110	3	DICF-8CS-E IC Socket	245A1221P0080	1	
111					
112	S2, S3	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	2	
113	S4, S7	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	2	
114					
115	SP1	IMSA9202B-1-02Z013GF PC Connector	224A4082P0020	1	
116	SP3	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
117	4	IMSA-9206H-GF PC Connector	224A4080P0020	1	
118					
119	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	

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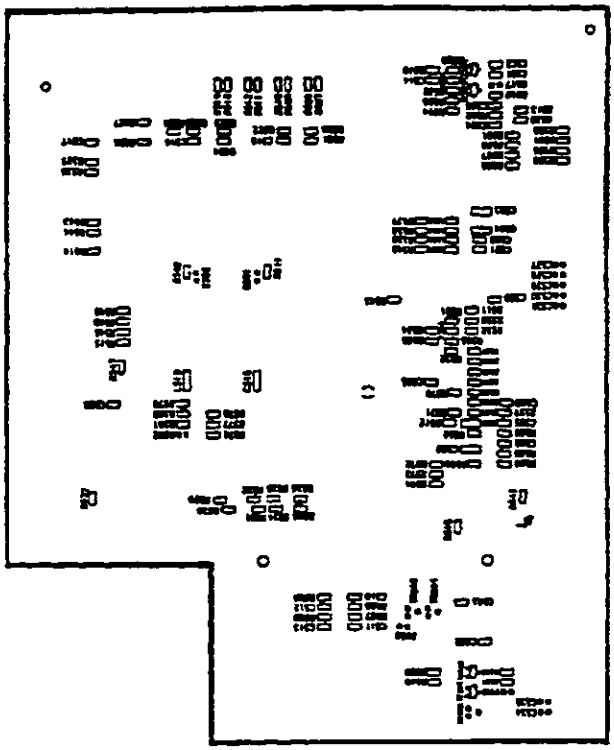
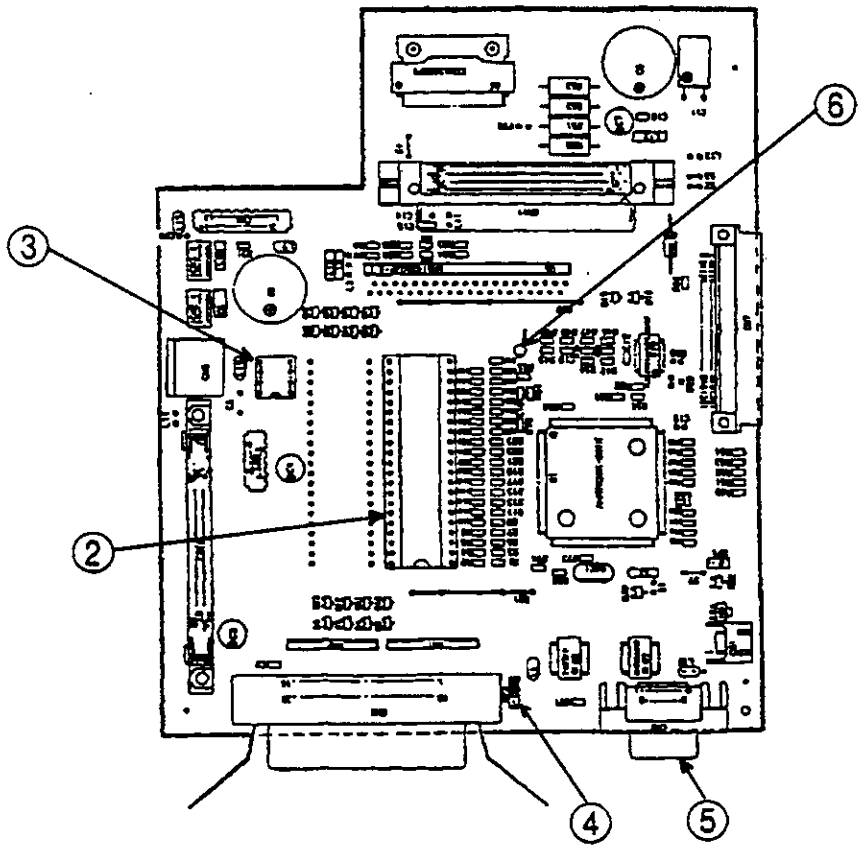
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
120					
121	EB1	Power supply bar L=30.48	3LH-31313-158	1	
122	EB2	Power supply bar L=45.72	3LH-31313-160	1	
123					
124		Special pan-head screw	4LB-181100-2	2	
125		Special pan-head screw (M2.5)	4LB-181200-3	2	
126		Nut	3N3-HH	2	
127		Nut	3N2.5-HH	2	
128					
129	6	MPS-04-0 Card spacer	143A1047P0001	1	
130	5	MB09HA24D Ferrite core	105A1072C1009	1	





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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D30	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D3-D6, D20-D23, D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	9	
5	D10-D13, D19, D24-D27, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	10	
6	D28	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D18	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R573	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	
10	R561	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
11	R566	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
12	R563	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
13	R568	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
14	R558	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
15	R569	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
16	R562	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R612	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R557	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R567	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
20	R521, R552, R83, R637	RM73B2A101J RN Resistor (CP)	323A5003J0101	4	
21	R506, R520, R522-R524, R527, R530, R543, R547	RM73B2A102J RN Resistor (CP)	323A5003J0102	9	
22					
23	R503, R525, R526, R564, R565	RM73B2A103J RN Resistor (CP)	323A5003J0103	5	
24					
25	R549, R571, R614	RM73B2A112J RN Resistor (CP)	323A5003J0112	3	
26	R59	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
27	R1-R25, R54, R533, R534, R550, R616, R625	RM73B2A151J RN Resistor (CP)	323A5003J0151	31	
28					
29	R546	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
30	R608	RM73B2A182J RN Resistor (CP)	323A5003J0182	1	
31	R85, R26-R41	RM73B2A201J RN Resistor (CP)	323A5003J0201	17	
32	R47, R48, R80, R528, R570, R576-R579, R639-R641	RM73B2A202J RN Resistor (CP)	323A5003J0202	12	
33					
34	R507-R514	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	

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(4YA4021-1007G11 - 2/2 - 3/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R559	RM73B2A225J RN Resistor (CP)	323A5003J0225	1	
36	R45, R49, R535-R540, R548, R551, R553-R556, R583,	RM73B2A241J RN Resistor (CP)	323A5003J0241	16	
37	R611				
38					
39	R69, R70, R72, R74, R82, R544	RM73B2A272J RN Resistor (CP)	323A5003J0272	6	
40					
41	R609	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
42	R606	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
43	R73, R620-R624, R626-R628	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
44					
45	R75-R79, R501, R502, R574	RM73B2A332J RN Resistor (CP)	323A5003J0332	8	
46					
47	R67, R68, R584	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
48	R615	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
49	R42-R44, R46, R529, R532, R541, R542, R545, R560, R613	RM73B2A472J RN Resistor (CP)	323A5003J0472	11	
50					
51					

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REF. NO.	SYMBOL	TYPE/NAME		PART NO.	Q'TY	REMARKS
52	R581, R607	RM73B2A561J RN Resistor (CP)		323A5003J0561	2	
53	R618, R619	RM73B2A562J RN Resistor (CP)		323A5003J0562	2	
54	R572	RM73B2A564J RN Resistor (CP)		323A5003J0564	1	
55	R61-R66	RM73B2A621J RN Resistor (CP)		323A5003J0621	6	
56	R71, R580	RM73B2A560J RN Resistor (CP)		323A5003J0560	2	
57	R81, R84	RM73B2A681J RN Resistor (CP)		323A5003J0681	2	
58	R504, R505	RM73B2A752J RN Resistor (CP)		323A5003J0752	2	
59	R86-R94, R629-R636	2125JPW Chip jumper (CP)		323A5003P0001	17	
60	R50-R53	MSF1/2B2ΩJ RS Resistor		324A1001J0209	4	
61						
62	RM1, RM2	MRM-8-332JA Block resistor		334A3268J0332	2	
63						
64	C515	CC2012SL1H561J CC Capacitor (CP)	50V	303A3007K0561	1	
65	C526	CC2012SL1H681J CC Capacitor (CP)	50V	303A3007K0681	1	
66	C6	CK92F1E155ZS CK Capacitor	25V 1.5μF	303A4117Z2155	1	
67	C2, C18, C21, C525	CK2012B1H102K CK Capacitor (CP)	50V	303A6008K3102	4	
68	C520-C522	CK2012B1H222K CK Capacitor (CP)	50V	303A6008K3222	3	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69 70 71	C10, C12, C16, C501, C502, C505, C506, C509-C514, C516, C517, C523, C524	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	17	
72	C503, C504, C507, C508	CK3216F1C105Z 16V CK Capacitor (CP) 1μF	303A6009Z1105	4	
73	C15, C518, C519	CK3216F1C155Z 16V CK Capacitor (CP)	303A6009Z1155	3	
74	C11	SXE16VB-220 16V CE Capacitor 220μF	304A1034C1221	1	
75	C8	SRC50VB-680 (M) 50V CE Capacitor 680μF	304A1035H1681	1	
76	C3	CEUSM1E101 25V CE Capacitor 100μF	304A1115E1101	1	
77	C4, C7	6.3MS5-100M 6.3V CE Capacitor 100μF	304A1046J0101	2	
78 79	C9	UVS1A332MRA 10V CE Capacitor 3300μF	304A1137A1332	1	
80	L1, L7, L15, L17, L18	ZBF253D-01 Beads filter	377A1115P1309	5	
81	L2, L6, L13	DSS306-OAE222Z EMI Filter	342A1009P2222	2	
82	L10	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
83 84	L16	ZJSC-2R2-101 EMI Filter	342A1012P2101	1	
85	Q8	7407FP BIP Digital IC (SO)	700A0003N0007	1	

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(4YA4021-1007G11 - 2/2 - 6/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	
87	Q7	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
88	Q10	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
89	Q6	ECN1362SP1 BIP Linear IC	720A1821M0005	1	
90	Q5	HM514260AZ-8 MOS-D-RAM	802A0021M2615	1	
91					
92	TR501, TR502	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	2	
93	TR1	2SB1123 PNP-LF-TR (CP)	601A1032N0002	1	
94	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
95					
96	CN9	DELC-J9PAF-21L9 Square-shaped connector	220A1376P0095	1	
97	CN8	57RE-40360-730B-D29 Square-shaped connector	220A1783P0362	1	
98	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
99	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
100	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
101	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	
102	CN4	ZC-014 PC Connector	224A3590P0140	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	CN5	ZC-006 PC Connector	224A3590P0060	1	
104	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
105	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
106					
107	2	DICF-42CS-E IC Socket	245A1221P0420	1	
108	3	DICF-8CS-E IC Socket	245A1221P0080	1	
109					
110	S2, S3	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	2	
111	S4, S7	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	2	
112					
113	SP1	IMSA9202B-1-02Z013GF PC Connector	224A4082P0020	1	
114	SP3	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
115	4	IMSA-9206H-GF PC Connector	224A4080P0020	1	
116					
117	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
118					
119	EB1	Power supply bar L=30.48	3LH-31313-158	1	

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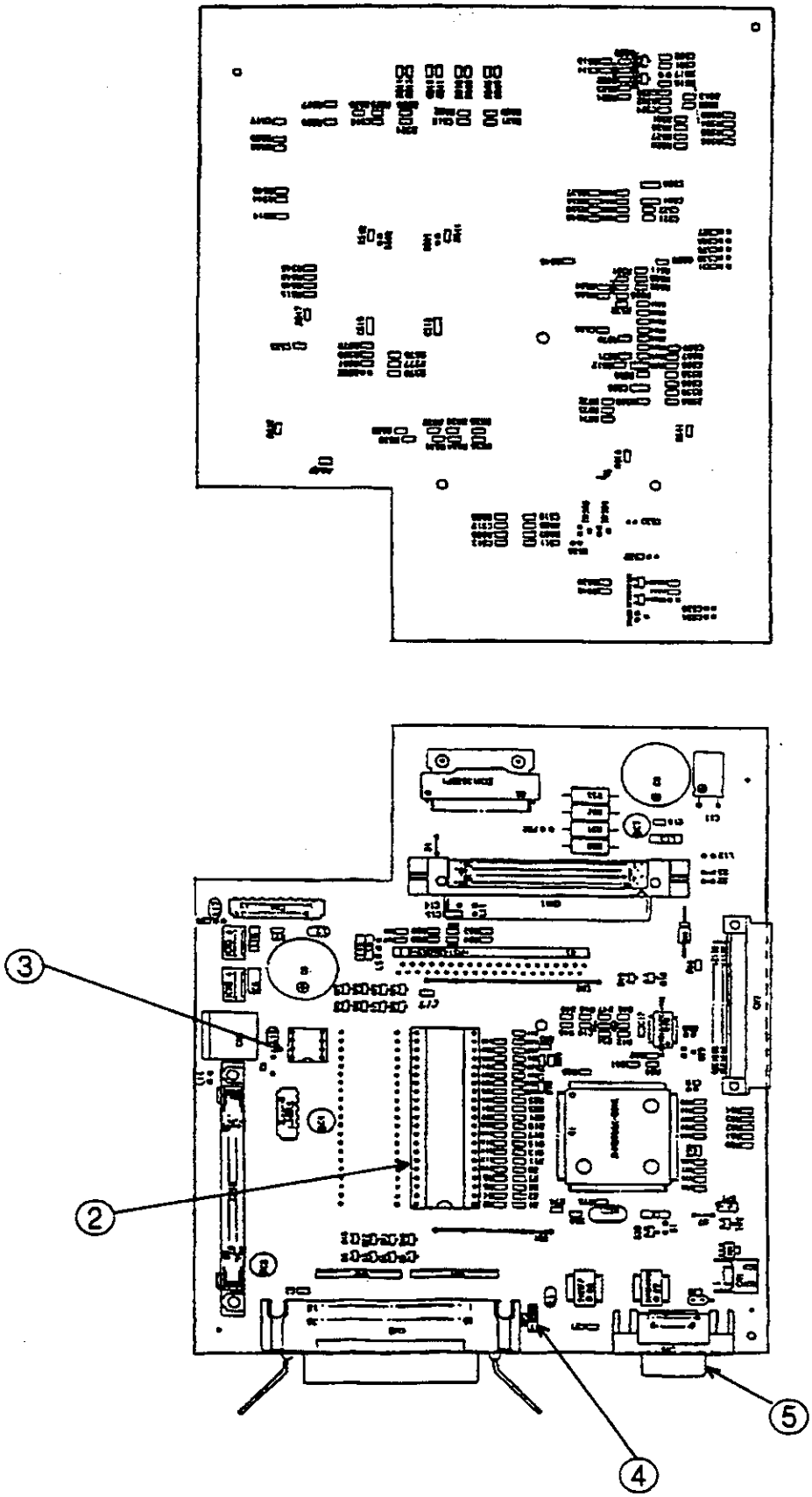
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
120	EB2	Power supply bar L=45.72	3LH-31313-160	1	
121					
122		Special pan-head screw	4LB-181100-2	2	
123		Special pan-head screw (M2.5)	4LB-181200-3	2	
124		Nut	3N3-HH	2	
125		Nut	3N2.5-HH	2	
126					
127	6	MPS-04-0 Card spacer	143A1047P0001	1	
128	5	MB09HA24D Ferrite core	105A1072C1009	1	



OLCW-Printed Circuit Board (Main Control Board) Rev. 7
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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D30	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D3-D6, D20-D23, D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	9	
5	D10-D13, D19, D24-D27, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	10	
6	D28	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D18	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R573	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	
10	R561	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
11	R566	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
12	R563	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
13	R568	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
14	R558	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
15	R569	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
16	R562	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R612	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R557	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R567	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
20	R26-R41, R83, R521, R637	RM73B2A101J RN Resistor (CP)	323A5003J0101	19	
21	R506, R520, R522-R524, R527, R530, R543, R547	RM73B2A102J RN Resistor (CP)	323A5003J0102	9	
22					
23	R503, R525, R526, R564, R565	RM73B2A103J RN Resistor (CP)	323A5003J0103	5	
24					
25	R549, R571, R614	RM73B2A112J RN Resistor (CP)	323A5003J0112	3	
26	R59	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
27	R1-R25, R54, R533, R534, R550, R616, R625	RM73B2A151J RN Resistor (CP)	323A5003J0151	31	
28					
29	R546	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
30	R608	RM73B2A182J RN Resistor (CP)	323A5003J0182	1	
31	R85	RM73B2A201J RN Resistor (CP)	323A5003J0201	1	
32	R47, R48, R80, R528, R570, R576-R579, R639-R641	RM73B2A202J RN Resistor (CP)	323A5003J0202	12	
33					
34	R507-R514	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R559	RM73B2A225J RN Resistor (CP)	323A5003J0225	1	
36	R45, R49, R535-R540, R548, R551, R553-R556, R583,	RM73B2A241J RN Resistor (CP)	323A5003J0241	16	
37	R611				
38					
39	R69, R70, R72, R74, R82, R544	RM73B2A272J RN Resistor (CP)	323A5003J0272	6	
40					
41	R609	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
42	R606	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
43	R73, R620-R624, R626-R628	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
44					
45	R75-R79, R501, R502, R574	RM73B2A332J RN Resistor (CP)	323A5003J0332	8	
46					
47	R67, R68, R584	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
48	R615	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
49	R42-R44, R46, R529, R532, R541, R542, R545, R560, R613	RM73B2A472J RN Resistor (CP)	323A5003J0472	11	
50					
51					

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REF. NO.	SYMBOL	TYPE/NAME		PART NO.	Q'TY	REMARKS
52	R581, R607	RM73B2A561J RN Resistor (CP)		323A5003J0561	2	
53	R618, R619	RM73B2A562J RN Resistor (CP)		323A5003J0562	2	
54	R572	RM73B2A564J RN Resistor (CP)		323A5003J0564	1	
55	R61-R66	RM73B2A621J RN Resistor (CP)		323A5003J0621	6	
56	R71, R580	RM73B2A560J RN Resistor (CP)		323A5003J0560	2	
57	R552	RM73B2A680J RN Resistor (CP)		323A5003J0680	1	
58	R81, R84	RM73B2A681J RN Resistor (CP)		323A5003J0681	2	
59	R504, R505	RM73B2A752J RN Resistor (CP)		323A5003J0752	2	
60	R86-R94, R610, R629-R636	2125JPW Chip jumper (CP)		323A5003P0001	18	
61	R50-R53	MSF1/2B2ΩJ RS Resistor		324A1001J0209	4	
62	RM1, RM2	MRM-8-332JA Block resistor		334A3268J0332	2	
63						
64	C17	CC2012SL1H271J CC Capacitor (CP)	50V	303A3007K0271	1	
65	C515	CC2012SL1H561J CC Capacitor (CP)	50V	303A3007K0561	1	
66	C526	CC2012SL1H681J CC Capacitor (CP)	50V	303A3007K0681	1	
67	C6	CK92F1E155ZS CK Capacitor	25V 1.5µF	303A4117Z2155	1	
68	C2, C18, C21, C525	CK2012B1H102K CK Capacitor (CP)	50V	303A6008K3102	4	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69	C520-C522	CK2012B1H222K 50V CK Capacitor (CP)	303A6008K3222	3	
70	C10, C12, C16, C501, C502, C505, C506, C509-C514, C516, C517, C523, C524	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	17	
71					
72					
73	C503, C504, C507, C508	CK3216F1C105Z 16V 1μF CK Capacitor (CP)	303A6009Z1105	4	
74	C15, C518, C519	CK3216F1C155Z 16V CK Capacitor (CP)	303A6009Z1155	3	
75	C11	SXE16VB-220 16V 220μF CE Capacitor	304A1034C1221	1	
76	C8	SRC50VB-680 (M) 50V 680μF CE Capacitor	304A1035H1681	1	
77	C3	CEUSM1E101 25V 100μF CE Capacitor	304A1041E1101	1	
78	C4, C7	6.3MS5-100M 6.3V 100μF CE Capacitor	304A1046J0101	2	
79	C9	UVS1A332MRA 10V 3300μF CE Capacitor	304A1137A1332	1	
80					
81	L1, L7, L15, L17, L18	ZBF253D-01 Beads filter	377A1115P1309	5	
82	L2, L6, L13	DSS306-OAE222Z EMI Filter	342A1009P2222	3	
83	L10	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
84	L16	ZJSC-2R2-101 EMI Filter	342A1012P2101	1	
85					

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	Q8	7407FP BIP Digital IC (SO)	700A0003N0007	1	
87	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	
88	Q7	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
89	Q10	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
90	Q6	ECN1362SP1 BIP Linear IC	720A1821M0005	1	
91	Q5	HM514260ZP-8 MOS-D-RAM	802A0003M2606	1	
92					
93	TR501, TR502	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	2	
94	TR1	2SB1123 PNP-LF-TR (CP)	601A1032N0002	1	
95	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
96					
97	CN9	DELC-J9PAF-21L9 Square-shaped connector	220A1376P0095	1	
98	CN8	57RE-40360-730B-D29 Square-shaped connector	220A1783P0362	1	
99	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
100	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
101	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
102	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	CN4	ZC-014 PC Connector	224A3590P0140	1	
104	CN5	ZC-006 PC Connector	224A3590P0060	1	
105	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
106	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
107					
108	2	DICF-42CS-E IC Socket	245A1221P0420	1	
109	3	DICF-8CS-E IC Socket	245A1221P0080	1	
110					
111	S2, S3	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	2	
112	S4, S7	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	2	
113					
114	SP1	IMSA9202B-1-02Z013GF PC Connector	224A4082P0020	1	
115	SP3	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
116	4	IMSA-9206H-GF PC Connector	224A4080P0020	1	
117					
118	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
119					

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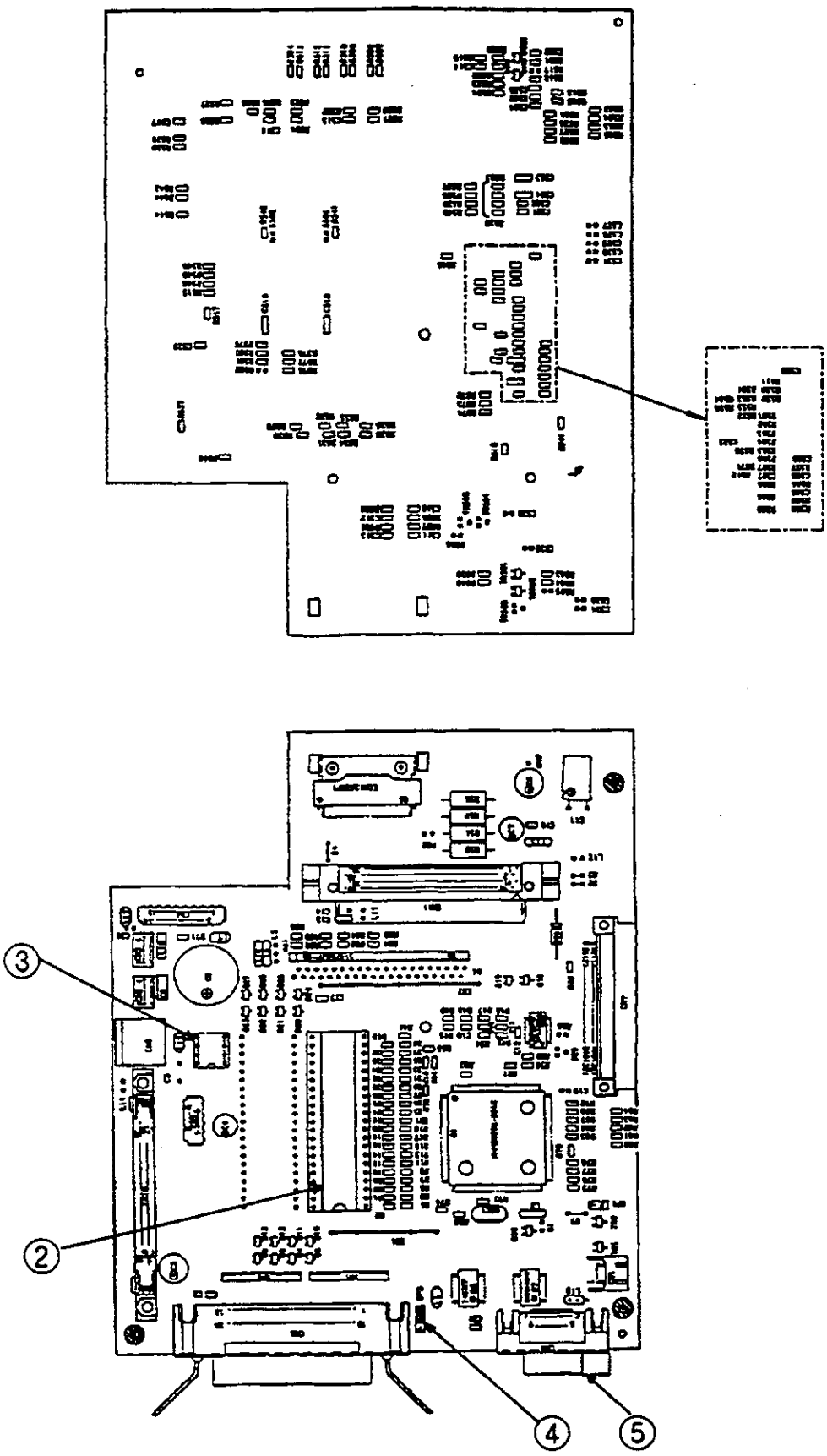
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
120	EB1	Power supply bar L=30.48	3LH-31313-158	1	
121	EB2	Power supply bar L=45.72	3LH-31313-160	1	
122					
123		Screw (with pan-head SW+ 2W)	+P(SW+2W)3-8-HHC	2	
124		Screw (with pan-head SW+ 2W)	+P(SW+W)2.5-8-HHC	2	
125		Nut	3N3-HH	2	
126		Nut	3N2.5-HH	2	
127					
128	5	MB09HA24D Ferrite core	105A1072C1009	1	



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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D30	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D3-D6, D20-D23, D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	9	
5	D10-D13, D19, D24-D27, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	10	
6	D28	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D18	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R573	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	
10	R561	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
11	R566	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
12	R563	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
13	R568	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
14	R558	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
15	R569	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
16	R562	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R612	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R557	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R567	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
20	R26-R41,R83,R521, R637	RM73B2A101J RN Resistor (CP)	323A5003J0101	19	
21	R506, R520, R522-R524, R527, R530, R543, R547	RM73B2A102J RN Resistor (CP)	323A5003J0102	9	
22					
23	R503, R525, R526, R564, R565	RM73B2A103J RN Resistor (CP)	323A5003J0103	5	
24					
25	R549, R571, R614	RM73B2A112J RN Resistor (CP)	323A5003J0112	3	
26	R59	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
27	R1-R25, R54, R533, R534, R550, R616, R625	RM73B2A151J RN Resistor (CP)	323A5003J0151	31	
28					
29	R546	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
30	R608	RM73B2A182J RN Resistor (CP)	323A5003J0182	1	
31	R85	RM73B2A201J RN Resistor (CP)	323A5003J0201	1	
32	R47, R48, R80, R528, R570, R639-R641	RM73B2A202J RN Resistor (CP)	323A5003J0202	8	
33					
34	R507-R514	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R559	RM73B2A225J RN Resistor (CP)	323A5003J0225	1	
36	R45, R49, R535-R540, R548, R551, R553-R556, R583,	RM73B2A241J RN Resistor (CP)	323A5003J0241	16	
37	R611				
38					
39	R69, R70, R72, R74, R82, R544	RM73B2A272J RN Resistor (CP)	323A5003J0272	6	
40					
41	R609	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
42	R606	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
43	R73, R620-R624, R626-R628	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
44					
45	R75-R79, R501, R502, R574	RM73B2A332J RN Resistor (CP)	323A5003J0332	8	
46					
47	R67, R68, R584	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
48	R615	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
49	R42-R44, R46, R529, R532, R541, R542, R545, R560, R613	RM73B2A472J RN Resistor (CP)	323A5003J0472	11	
50					
51					

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52	R576-R579, R581, R607	RM73B2A561J RN Resistor (CP)	323A5003J0561	6	
53	R618, R619	RM73B2A562J RN Resistor (CP)	323A5003J0562	2	
54	R572	RM73B2A564J RN Resistor (CP)	323A5003J0564	1	
55	R61-R66	RM73B2A621J RN Resistor (CP)	323A5003J0621	6	
56	R71, R580	RM73B2A560J RN Resistor (CP)	323A5003J0560	2	
57	R552	RM73B2A680J RN Resistor (CP)	323A5003J0680	1	
58	R81, R84	RM73B2A681J RN Resistor (CP)	323A5003J0681	2	
59	R504, R505	RM73B2A752J RN Resistor (CP)	323A5003J0752	2	
60	R86-R94, R610,R629-R636	2125JPW Chip Jumper (CP)	323A5003P0001	18	
61	R50-R53	MSF1/2B2ΩJ RS Resistor	324A1001J0209	4	
62	RM1, RM2	MRM-8-332JA Block Resistor	334A3268J0332	2	
63					
64	C17	CC2012SL1H271J 50V CC Capacitor (CP)	303A3007K0271	1	
65	C515	CC2012SL1H561J 50V CC Capacitor (CP)	303A3007K0561	1	
66	C526	CC2012SL1H681J 50V CC Capacitor (CP)	303A3007K0681	1	
67	C6	CK92F1E155ZS 25V CK Capacitor 1.5μF	303A4117Z2155	1	
68	C2, C18, C21, C525	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	4	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69	C520-C522	CK2012B1H222K 50V CK Capacitor (CP)	303A6008K3222	3	
70	C10, C12, C16, C501, C502, C505, C506, C509-C514, C516, C517, C523, C524	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	17	
71					
72					
73	C503, C504, C507, C508	CK3216F1C105Z 16V CK Capacitor (CP) 1μF	303A6009Z1105	4	
74	C15, C518, C519	CK3216F1C155Z 16V CK Capacitor (CP)	303A6009Z1155	3	
75	C11	SXE16VB-220 16V CE Capacitor 220μF	304A1034C1221	1	
76	C8	SRC50VB-680 (M) 50V CE Capacitor 680μF	304A1041H1470	1	
77	C3	CEUSM1E101 25V CE Capacitor 100μF	304A1041E1101	1	
78	C4, C7	6.3MS5-100M 6.3V CE Capacitor 100μF	304A1046J0101	2	
79	C9	UVS1A332MRA 10V CE Capacitor 3300μF	304A1137A1332	1	
80					
81	L1, L7, L15, L17, L18	ZBF253D-01 Beads filter	377A1115P1309	5	
82	L2, L6, L13	DSS306-OAE222Z EMI Filter	342A1009P2222	3	
83	L10	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
84	L16	ZJSC-2R2-101 EMI Filter	342A1012P2101	1	
85					

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	Q8	7407FP BIP Digital IC (SO)	700A0003N0007	1	
87	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	
88	Q7	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
89	Q10	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
90	Q6	ECN1362SP1 BIP Linear IC	720A1821M0005	1	
91	Q5	514260ZP-80 MOS-D-RAM	802A0003M2606	1	
92					
93	TR501, TR502	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	2	
94	TR1	2SA1338 PNP-LF-TR (CP)	600A1032N0010	1	
95	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
96					
97	CN9	DELC-J9PAF-21L9 Square-shaped connector	220A1376P0095	1	
98	CN8	57RE-40360-730B-D29 Square-shaped connector	220A1783P0362	1	
99	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
100	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
101	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
102	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	CN4	ZC-014 PC Connector	224A3590P0140	1	
104	CN5	ZC-006 PC Connector	224A3590P0060	1	
105	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
106	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
107					
108	2	DICF-42CS-E IC Socket	245A1221P0420	1	
109	3	DICF-8CS-E IC Socket	245A1221P0080	1	
110					
111	S2, S3	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	2	
112	S4, S7	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	2	
113					
114	SP1	IMSA9202B-1-02Z013GF PC Connector	224A4082P0020	1	
115	SP3	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
116	4	IMSA-9206H-GF PC Connector	224A4080P0020	1	
117					
118	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
119					

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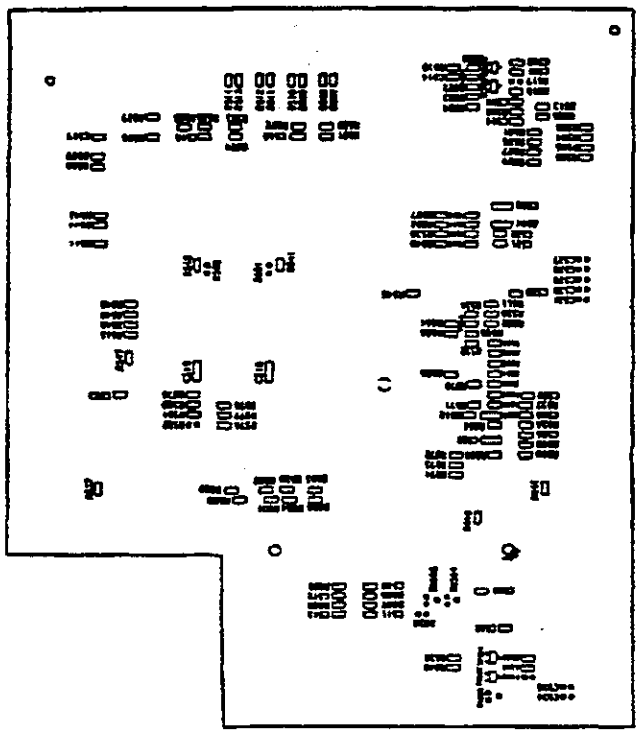
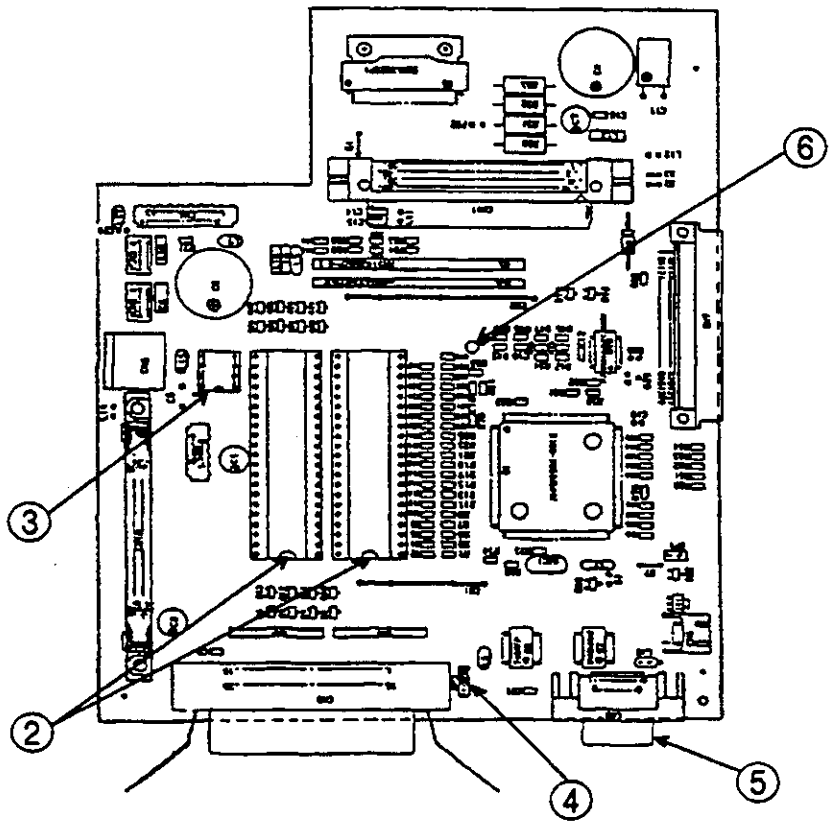
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
120	EB1	Power supply bar L=30.48	3LH-31313-158	1	
121	EB2	Power supply bar L=45.72	3LH-31313-160	1	
122					
123		Screw (with pan-head SW + 2W)	+P(SW+2W)3-8-HHC	2	
124		Screw (with pan-head SW + 2W)	+P(SW+W)2.5-8-HHC	2	
125		Nut	3N3-HH	2	
126		Nut	3N2.5-HH	2	
127					
128	5	MB09HA24D Ferrite core	105A1072C1009	1	





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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D30	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D3-D6, D20-D23, D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	9	
5	D10-D13, D19, D24-D27, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	10	
6	D28	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D18	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R563	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
10	R573	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	
11	R568	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
12	R558	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
13	R567	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
14	R569	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
15	R561	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
16	R562	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R612	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R557	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R566	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
20	R521, R552, R83, R637	RM73B2A101J RN Resistor (CP)	323A5003J0101	4	
21	R506, R520, R522-R524, R527, R530, R543, R547	RM73B2A102J RN Resistor (CP)	323A5003J0102	9	
22					
23	R503, R525, R526, R564, R565	RM73B2A103J RN Resistor (CP)	323A5003J0103	5	
24					
25	R549, R571, R614	RM73B2A112J RN Resistor (CP)	323A5003J0112	3	
26	R59	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
27	R1-R25, R54, R533, R534, R550, R616, R625	RM73B2A151J RN Resistor (CP)	323A5003J0151	31	
28					
29	R546	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
30	R608	RM73B2A182J RN Resistor (CP)	323A5003J0182	1	
31	R85, R26-R41	RM73B2A201J RN Resistor (CP)	323A5003J0201	17	
32	R47, R48, R80, R528, R570, R576-R579, R639-R641	RM73B2A202J RN Resistor (CP)	323A5003J0202	12	
33					
34	R507-R514	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R559	RM73B2A225J RN Resistor (CP)	323A5003J0225	1	
36	R45, R49, R535-R540, R548, R551, R553-R556, R583,	RM73B2A241J RN Resistor (CP)	323A5003J0241	16	
37	R611				
38					
39	R69, R70, R72, R74, R82, R544	RM73B2A272J RN Resistor (CP)	323A5003J0272	6	
40					
41	R609	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
42	R606	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
43	R73, R620-R624, R626-R628	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
44					
45	R75-R79, R501, R502, R574	RM73B2A332J RN Resistor (CP)	323A5003J0332	8	
46					
47	R67, R68, R584	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
48	R615	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
49	R42-R44, R46, R529, R532, R541, R542, R545, R560, R613	RM73B2A472J RN Resistor (CP)	323A5003J0472	11	
50					
51					

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52	R581, R607	RM73B2A561J RN Resistor (CP)	323A5003J0561	2	
53	R618, R619	RM73B2A562J RN Resistor (CP)	323A5003J0562	2	
54	R572	RM73B2A564J RN Resistor (CP)	323A5003J0564	1	
55	R61-R66	RM73B2A621J RN Resistor (CP)	323A5003J0621	6	
56	R71, R580	RM73B2A560J RN Resistor (CP)	323A5003J0560	2	
57	R81, R84	RM73B2A681J RN Resistor (CP)	323A5003J0681	2	
58	R504, R505	RM73B2A752J RN Resistor (CP)	323A5003J0752	2	
59	R86-R94, R629-R636	2125JPW Chip jumper (CP)	323A5003P0001	17	
60	R50-R53	MSF1/2B2ΩJ RS Resistor	324A1001J0209	4	
61					
62	RM1, RM2	MRM-8-332JA Block resistor	334A3268J0332	2	
63					
64	C520-C522	CK2012B1H103K 50V CK Capacitor (CP)	303A6008K3103	3	
65	C515	CC2012SL1H561J 50V CC Capacitor (CP)	303A3007K0561	1	
66	C526	CC2012SL1H681J 50V CC Capacitor (CP)	303A3007K0681	1	
67	C6	CK92F1E155ZS 25V CK Capacitor 1.5μF	303A4117Z2155	1	
68	C2, C18, C21, C525	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	4	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69 70 71	C10, C12, C16, C501, C502, C505, C506, C509-C514, C516, C517, C523, C524	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	17	
72	C503, C504, C507, C508	CK3216F1C105Z 16V CK Capacitor (CP) 1μF	303A6009Z1105	4	
73	C14, C15, C518, C519	CK3216F1C155Z 16V CK Capacitor (CP)	303A6009Z1155	4	
74	C11	SXE16VB-220 16V CE Capacitor 220μF	304A1034C1221	1	
75	C8	SRC50VB-680 (M) 50V CE Capacitor 680μF	304A1035H1681	1	
76	C4, C7	6.3MS5-100M 6.3V CE Capacitor 100μF	304A1046J0101	2	
77	C3	CEUSM1E101 25V CE Capacitor 100μF	304A1041E1101	1	
78	C9	UVS1A332MRA 10V CE Capacitor 3300μF	304A1137A1332	1	
79	L1, L7, L15, L17, L18	ZBF253D-01 Beads filter	377A1115P1309	5	
80	L10	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
81	L16	ZJSC-2R2-101 EMI Filter	342A1012P2101	1	
82 83	L2, L5, L6, L13	DSS306-OAE222Z EMI Filter	342A1009P2222	4	
84	Q8	7407FP BIP Digital IC (SO)	700A0003N0007	1	
85	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	Q7	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
87	Q10	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
88	Q6	ECN1362SP1 BIP Linear IC	720A1821M0005	1	
89	Q4, Q5	HM514260AZ-8 MOS-D-RAM	802A0021M2615	2	
90					
91	TR501, TR502	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	2	
92	TR1	2SB1123 PNP-LF-TR (CP)	601A1032N0002	1	
93	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
94					
95	CN9	DELC-J9PAF-21L9 Square-shaped connector	220A1376P0095	1	
96	CN8	57RE-40360-730B-D29 Square-shaped connector	220A1783P0362	1	
97	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
98	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
99	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
100	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	
101	CN4	ZC-014 PC Connector	224A3590P0140	1	
102	CN5	ZC-006 PC Connector	224A3590P0060	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
104	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
105					
106	2	DICF-42CS-E IC Socket	245A1221P0420	2	
107	3	DICF-8CS-E IC Socket	245A1221P0080	1	
108					
109	S2, S3	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	2	
110	S4, S7	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	2	
111					
112	SP1	IMSA9202B-1-02Z013GF PC Connector	224A4082P0020	1	
113	SP3	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
114	4	IMSA-9206H-GF PC Connector	224A4080P0020	1	
115					
116	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
117					
118	EB1	Power supply bar L=30.48	3LH-31313-158	1	
119	EB2	Power supply bar L=45.72	3LH-31313-160	1	

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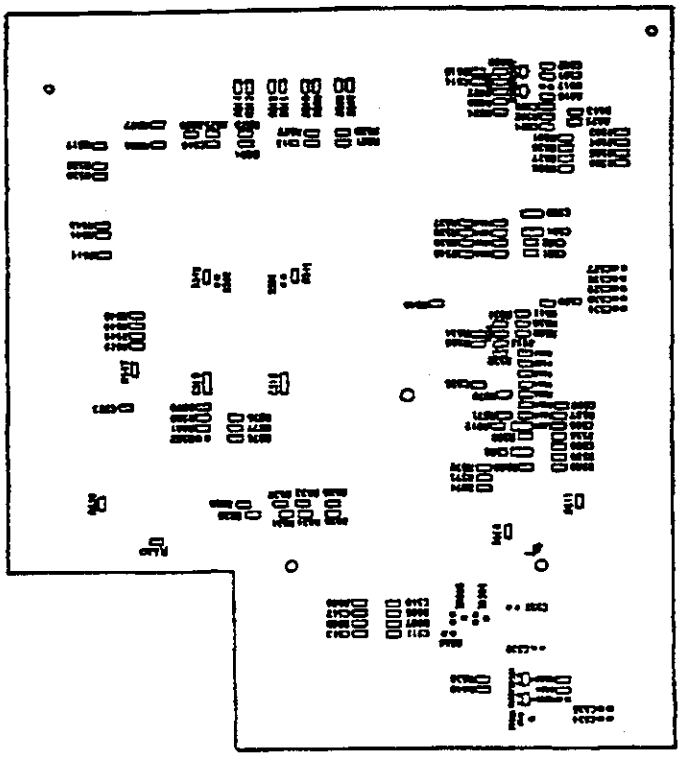
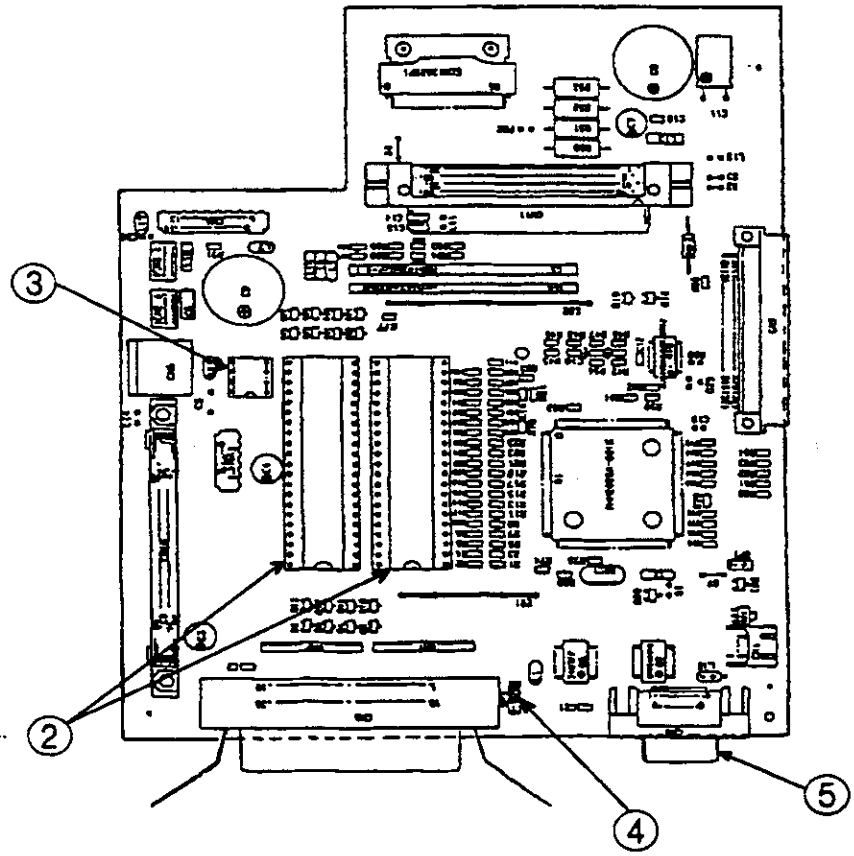
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
120					
121		Special pan-head screw	4LB-181100-2	1	
122		Special pan-head screw (M2.5)	4LB-181200-3	1	
123		Nut	3N3-HH	2	
124		Nut	3N2.5-HH	2	
125	6	MPS-04-0 Card spacer	143A1047P0001	1	
126	5	MB09HA24D Ferrite core	105A1072C1009	1	





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(4YA4021-1007G13 - 2/2 - 1/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D30	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D3-D6, D20-D23, D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	9	
5	D10-D13, D19, D24-D27, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	10	
6	D28	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D18	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R563	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
10	R573	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	
11	R568	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
12	R558	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
13	R567	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
14	R569	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
15	R561	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
16	R562	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R612	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R557	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R566	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
20	R26-R41, R83, R521, R552, R637	RM73B2A101J RN Resistor (CP)	323A5003J0101	19	
21	R506, R520, R522-R524, R527, R530, R543, R547	RM73B2A102J RN Resistor (CP)	323A5003J0102	9	
22					
23	R503, R525, R526, R564, R565	RM73B2A103J RN Resistor (CP)	323A5003J0103	5	
24					
25	R549, R571, R614	RM73B2A112J RN Resistor (CP)	323A5003J0112	3	
26	R59	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
27	R1-R25, R54, R533, R534, R550, R616, R625	RM73B2A151J RN Resistor (CP)	323A5003J0151	31	
28					
29	R546	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
30	R608	RM73B2A182J RN Resistor (CP)	323A5003J0182	1	
31	R85	RM73B2A201J RN Resistor (CP)	323A5003J0201	1	
32	R47, R48, R80, R528, R570, R576-R579, R639-R641	RM73B2A202J RN Resistor (CP)	323A5003J0202	12	
33					
34	R507-R514	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R559	RM73B2A225J RN Resistor (CP)	323A5003J0225	1	
36	R45, R49, R535-R540, R548, R551, R553-R556, R583,	RM73B2A241J RN Resistor (CP)	323A5003J0241	16	
37	R611				
38					
39	R69, R70, R72, R74, R82, R544	RM73B2A272J RN Resistor (CP)	323A5003J0272	6	
40					
41	R609	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
42	R606	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
43	R73, R620-R624, R626-R628	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
44					
45	R75-R79, R501, R502, R574	RM73B2A332J RN Resistor (CP)	323A5003J0332	8	
46					
47	R67, R68, R584	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
48	R615	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
49	R42-R44, R46, R529, R532, R541, R542, R545, R560, R613	RM73B2A472J RN Resistor (CP)	323A5003J0472	11	
50					
51					

OLCW-3Printed Circuit Board (Main Control Board) Rev. 7
(4YA4021-1007G13 - 2/2 - 4/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52	R581, R607	RM73B2A561J RN Resistor (CP)	323A5003J0561	2	
53	R618, R619	RM73B2A562J RN Resistor (CP)	323A5003J0562	2	
54	R572	RM73B2A564J RN Resistor (CP)	323A5003J0564	1	
55	R61-R66	RM73B2A621J RN Resistor (CP)	323A5003J0621	6	
56	R71, R580	RM73B2A560J RN Resistor (CP)	323A5003J0560	2	
57	R552	RM73B2A680J RN Resistor (CP)	323A5003J0680	1	
58	R81, R84	RM73B2A681J RN Resistor (CP)	323A5003J0681	2	
59	R504, R505	RM73B2A752J RN Resistor (CP)	323A5003J0752	2	
60	R86-R94, R610, R629-R636	2125JPW Chip Jumper (CP)	323A5003P0001	18	
61	R50-R53	MSF1/2B2ΩJ RS Resistor	324A1001J0209	4	
62	RM1, RM2	MRM-8-332JA Block resistor	334A3268J0332	2	
63					
64	C17	CC2012SL1H271J 50V CC Capacitor (CP)	303A3007K0271	1	
65	C520-C522	CK2012B1H103K 50V CK Capacitor	303A6008K103	3	
66	C515	CC2012SL1H561J 50V CC Capacitor (CP)	303A3007K0561	1	
67	C526	CC2012SL1H681J 50V CC Capacitor (CP)	303A3007K0681	1	
68	C6	CK92F1E155ZS 25V CK Capacitor 1.5µF	303A4117Z2155	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69	C2, C18, C21, C525	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	4	
70	C10, C12, C16, C501, C502, C505, C506, C509-C514,	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	17	
71	C516, C517, C523, C524				
72					
73	C503, C504, C507, C508	CK3216F1C105Z 16V CK Capacitor (CP) 1μF	303A6009Z1105	4	
74	C14, C15, C518, C519	CK3216F1C155Z 16V CK Capacitor (CP)	303A6009Z1155	4	
75	C11	SXE16VB-220 16V CE Capacitor 220μF	304A1034C1221	1	
76	C8	SRC50VB-680 (M) 50V CE Capacitor 680μF	304A1035H1681	1	
77	C4, C7	6.3MS5-100M 6.3V CE Capacitor 100μF	304A1046J0101	2	
78	C3	CEUSM1E101 25V CE Capacitor 100μF	304A1041E1101	1	
79	C9	UVS1A332MRA 10V CE Capacitor 3300μF	304A1137A1332	1	
80	L1, L7, L15, L17, L18	ZBF253D-01 Beads filter	377A1115P1309	5	
81	L10	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
82	L16	ZJSC-2R2-101 EMI Filter	342A1012P2101	1	
83	L2, L5, L6, L13	DSS306-OAE222Z EMI Filter	342A1009P2222	4	
84					
85	Q8	7407FP BIP Digital IC (SO)	700A0003N0007	1	

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REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	
87	Q7	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
88	Q10	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
89	Q6	ECN1362SP1 BIP Linear IC	720A1821M0005	1	
90	Q4, Q5	514260ZP-80 MOS-D-RAM	802A0003M2606	2	
91					
92	TR501, TR502	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	2	
93	TR1	2SB1123 PNP-LF-TR (CP)	601A1032N0002	1	
94	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
95					
96	CN9	DELC-J9PAF-21L9 Square-shaped connector	220A1376P0095	1	
97	CN8	57RE-40360-730B-D29 Square-shaped connector	220A1783P0362	1	
98	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
99	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
100	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
101	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	
102	CN4	ZC-014 PC Connector	224A3590P0140	1	

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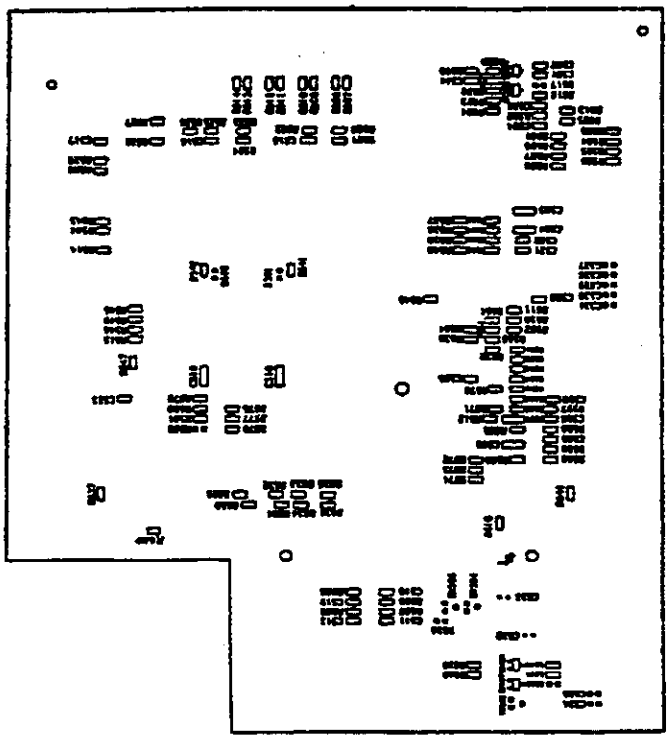
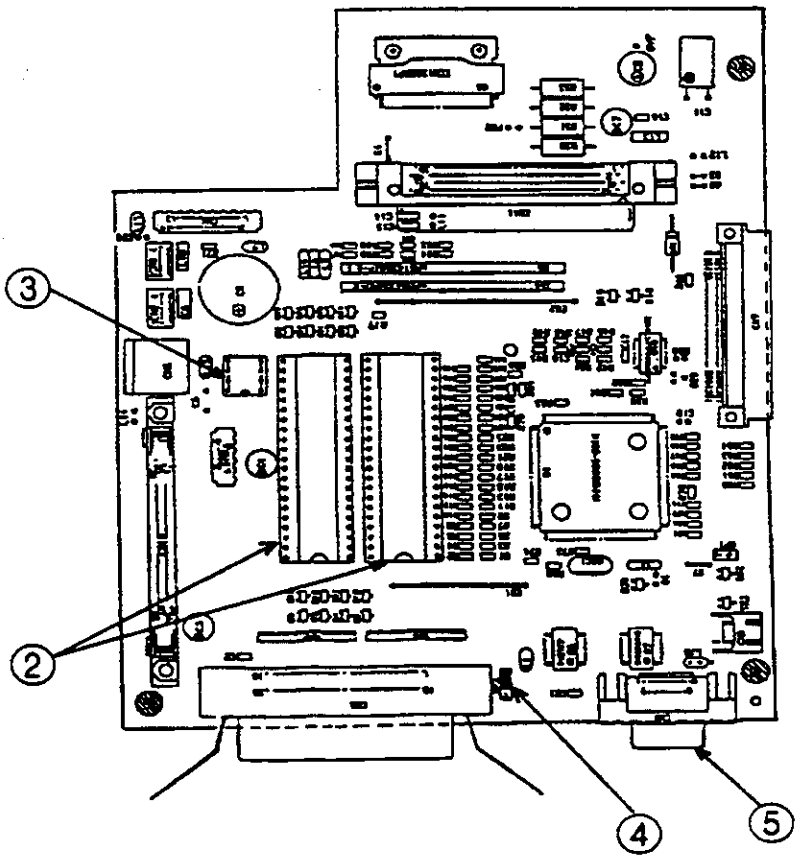
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	CN5	ZC-006 PC Connector	224A3590P0060	1	
104	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
105	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
106					
107	2	DICF-42CS-E IC Socket	245A1221P0420	2	
108	3	DICF-8CS-E IC Socket	245A1221P0080	1	
109					
110	S2, S3	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	2	
111	S4, S7	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	2	
112					
113	SP1	IMSA9202B-1-02Z013GF PC Connector	224A4082P0020	1	
114	SP3	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
115	4	IMSA-9206H-GF PC Connector	224A4080P0020	1	
116					
117	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
118					
119	EB1	Power supply bar L=30.48	3LH-31313-158	1	

OLCW-3Printed Circuit Board (Main Control Board) Rev. 7
(4YA4021-1007G13 - 2/2 - 8/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
120	EB2	Power Supply Bar L=45.72	3LH-31313-160	1	
121					
122		Screw (with pan-head SW + 2W)	+P(SW+2W)3-8-HHC	2	
123		Screw (with pan-head SW + 2W)	+P(SW+W)2.5-8-HHC	2	
124		Nut	3N3-HH	2	
125		Nut	3N2.5-HH	2	
126	5	MB09HA24D Ferrite core	105A1072C1009	1	





OLCW-3Printed Circuit Board (Main Control Board) Rev. 8
(4YA4021-1003G13 - 1/2)

OLCW-3Printed Circuit Board (Main Control Board) Rev. 8
(4YA4021-1007G13 - 2/2 - 1/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D30	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D3-D6, D20-D23, D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	9	
5	D10-D13, D19, D24-D27, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	10	
6	D28	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D18	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R563	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
10	R573	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	
11	R568	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
12	R558	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
13	R567	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
14	R569	RM73B2A242F RN Resistor (CP)	323A5003F0242	1	
15	R561	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
16	R562	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R612	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

OLCW-3Printed Circuit Board (Main Control Board) Rev. 8
(4YA4021-1007G13 - 2/2 - 2/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R557	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R566	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
20	R26-41, R83, R521, R637	RM73B2A101J RN Resistor (CP)	323A5003J0101	19	
21	R506, R520, R522-R524, R527, R530, R543, R547	RM73B2A102J RN Resistor (CP)	323A5003J0102	9	
22					
23	R503, R525, R526, R564, R565	RM73B2A103J RN Resistor (CP)	323A5003J0103	5	
24					
25	R549, R571, R614	RM73B2A112J RN Resistor (CP)	323A5003J0112	3	
26	R59	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
27	R1-R25, R54, R533, R534, R550, R616, R625	RM73B2A151J RN Resistor (CP)	323A5003J0151	31	
28					
29	R546	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
30	R608	RM73B2A182J RN Resistor (CP)	323A5003J0182	1	
31	R85	RM73B2A201J RN Resistor (CP)	323A5003J0201	1	
32	R47, R48, R80, R528, R570, R639-R641	RM73B2A202J RN Resistor (CP)	323A5003J0202	8	
33					
34	R507-R514	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	

OLCW-3Printed Circuit Board (Main Control Board) Rev. 8
(4YA4021-1007G13 - 2/2 - 3/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R559	RM73B2A225J RN Resistor (CP)	323A5003J0225	1	
36	R45, R49, R535-R540, R548, R551, R553-R556, R583,	RM73B2A241J RN Resistor (CP)	323A5003J0241	16	
37	R611				
38					
39	R69, R70, R72, R74, R82, R544	RM73B2A272J RN Resistor (CP)	323A5003J0272	6	
40					
41	R609	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
42	R606	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
43	R73, R620-R624, R626-R628	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
44					
45	R75-R79, R501, R502, R574	RM73B2A332J RN Resistor (CP)	323A5003J0332	8	
46					
47	R67, R68, R584	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
48	R615	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
49	R42-R44, R46, R529, R532, R541, R542, R545, R560, R613	RM73B2A472J RN Resistor (CP)	323A5003J0472	11	
50					
51					

OLCW-3Printed Circuit Board (Main Control Board) Rev. 8
(4YA4021-1007G13 - 2/2 - 4/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52	R576-R579, R581, R607	RM73B2A561J RN Resistor (CP)	323A5003J0561	6	
53	R618, R619	RM73B2A562J RN Resistor (CP)	323A5003J0562	2	
54	R572	RM73B2A564J RN Resistor (CP)	323A5003J0564	1	
55	R61-R66	RM73B2A621J RN Resistor (CP)	323A5003J0621	6	
56	R71, R580	RM73B2A560J RN Resistor (CP)	323A5003J0560	2	
57	R552	RM73B2A680J RN Resistor (CP)	323A5003J0680	1	
58	R81, R84	RM73B2A681J RN Resistor (CP)	323A5003J0681	2	
59	R504, R505	RM73B2A752J RN Resistor (CP)	323A5003J0752	2	
60	R86-R94, R610, R629-R636	2125JPW Chip jumper (CP)	323A5003P0001	18	
61	R50-R53	MSF1/2B2ΩJ RS Resistor	324A1001J0209	4	
62	RM1, RM2	MRM-8-332JA Block resistor	334A3268J0332	2	
63					
64	C17	CC2012SL1H271J 50V CC Capacitor (CP)	303A3007K0271	1	
65	C520-C522	CK2012B1H103K 50V CK Capacitor (CP)	303A6008k3103	3	
66	C515	CC2012SL1H561J 50V CC Capacitor (CP)	303A3007K0561	1	
67	C526	CC2012SL1H681J 50V CC Capacitor (CP)	303A3007K0681	1	
68	C6	CK92F1E155ZS 25V CK Capacitor 1.5μF	303A4117Z2155	1	

OLCW-3Printed Circuit Board (Main Control Board) Rev. 8
(4YA4021-1007G13 - 2/2 - 5/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69	C2, C18, C21, C525	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	4	
70	C10, C12, C16, C501, C502, C505, C506, C509-C514, C516, C517, C523, C524	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	17	
71					
72					
73	C503, C504, C507, C508	CK3216F1C105Z 16V 1μF CK Capacitor (CP)	303A6009Z1105	4	
74	C14, C15, C518, C519	CK3216F1C155Z 16V CK Capacitor (CP)	303A6009Z1155	4	
75	C11	SXE16VB-220 16V 220μF CE Capacitor	304A1034C1221	1	
76	C8	CEUSM1H470 50V 47μF CE Capacitor	304A1041H1470	1	
77	C4, C7	6.3MS5-100M 6.3V 100μF CE Capacitor	304A1046J0101	2	
78	C3	CEUSM1E101 25V 100μF CE Capacitor	304A1041E1101	1	
79	C9	UVS1A332MRA 10V 3300μF CE Capacitor	304A1137A1332	1	
80	L1, L7, L15, L17, L18	ZBF253D-01 Beads filter	377A1115P1309	5	
81	L10	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
82	L16	ZJSC-2R2-101 EMI Filter	342A1012P2101	1	
83	L2, L5, L6, L13	DSS306-OAE222Z EMI Filter	342A1009P2222	4	
84					
85	Q8	7407FP BIP Digital IC (SO)	700A0003N0007	1	

OLCW-3Printed Circuit Board (Main Control Board) Rev. 8
(4YA4021-1007G13 - 2/2 - 6/8)

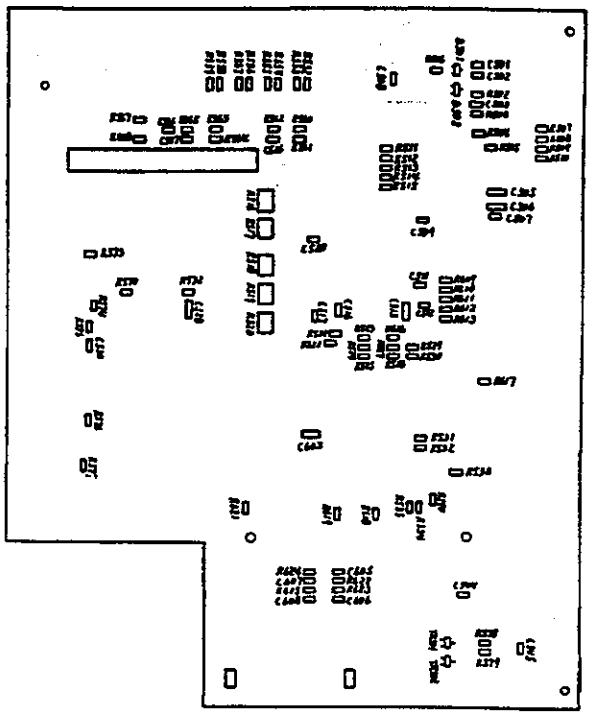
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	
87	Q7	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
88	Q10	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
89	Q6	ECN1362SP1 BIP Linear IC	720A1821M0005	1	
90	Q5	514260ZP-80 MOS-D-RAM	802A0003M2606	1	
91					
92	TR501, TR502	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	2	
93	TR1	2SA1338 PNP-LF-TR (CP)	600A1032N0010	1	
94	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
95					
96	CN9	DELC-J9PAF-21L9 Square-shaped connector	220A1376P0095	1	
97	CN8	57RE-40360-730B-D29 Square-shaped connector	220A1783P0362	1	
98	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
99	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
100	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
101	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	
102	CN4	ZC-014 PC Connector	224A3590P0140	1	

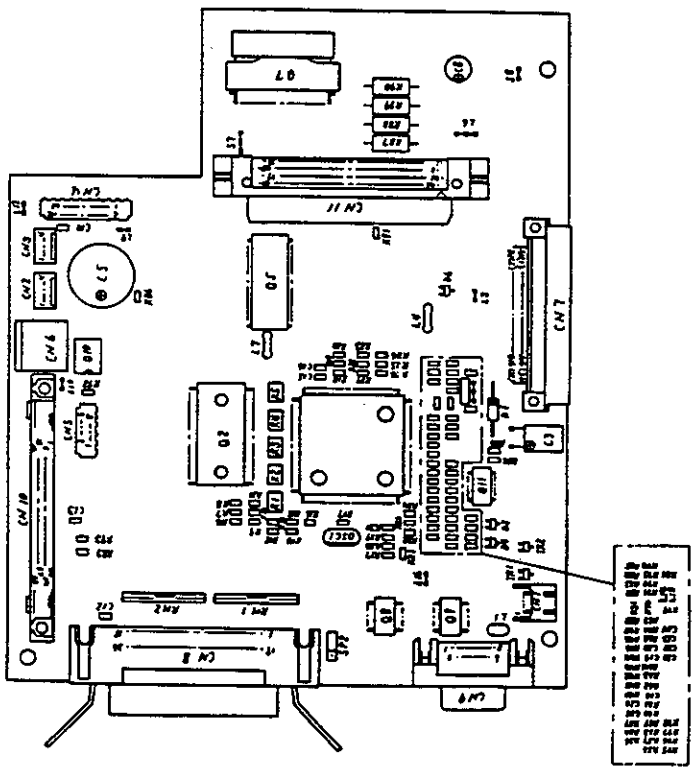
OLCW-3Printed Circuit Board (Main Control Board) Rev. 8
(4YA4021-1007G13 - 2/2 - 7/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	CN5	ZC-006 PC Connector	224A3590P0060	1	
104	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
105	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
106					
107	2	DICF-42CS-E IC Socket	245A1221P0420	2	
108	3	DICF-8CS-E IC Socket	245A1221P0080	1	
109					
110	S2, S3	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	2	
111	S4, S7	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	2	
112					
113	SP1	IMSA9202B-1-02Z013GF PC Connector	224A4082P0020	1	
114	SP3	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
115	4	IMSA-9206H-GF PC Connector	224A4080P0020	1	
116					
117	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
118					
119	EB1	Power supply bar L=30.48	3LH-31313-158	1	

OLCW-3Printed Circuit Board (Main Control Board) Rev. 8
(4YA4021-1007G13 - 2/2 - 8/8)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
120	EB2	Power supply bar L=45.72	3LH-31313-160	1	
121					
122		Screw (with pan-head SW + 2W)	+P(SW+2W)3-8-HHC	2	
123		Screw (with pan-head SW + 2W)	+P(SW+W)2.5-8-HHC	2	
124		Nut	3N3-HH	2	
125		Nut	3N2.5-HH	2	
126	5	MB09HA24D Ferrite core	105A1072C1009	1	





OLCL-Printed Circuit Board (Main Control Board)
(4YA4121-1046G11-1/2)

OLCL-Printed Circuit Board (Main Control Board)
(4YA4121-1046G11 - 2/2 - 1/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D6	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	1	
5	D5, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	2	
6	D1	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D4	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R35	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
10	R76	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	
11	R84	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
12	R62	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
13	R37	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
14	R60, R617	RM73B2A242F RN Resistor (CP)	323A5003F0242	2	
15	R530	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
16	R529	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R75	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

OLCL-Printed Circuit Board (Main Control Board)
(4YA4121-1046G11 - 2/2 - 2/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R85	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R36	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
20	R51, R71, R561, R613	RM73B2A101J RN Resistor (CP)	323A5003J0101	4	
21	R47, R48, R67, R79, R83, R510, R560, R562-R564, R567,	RM73B2A102J RN Resistor (CP)	323A5003J0102	13	
22	R573, R576				
23					
24	R63, R64, R507, R521, R565, R566	RM73B2A103J RN Resistor (CP)	323A5003J0103	6	
25					
26	R65, R86, R575	RM73B2A112J RN Resistor (CP)	323A5003J0112	3	
27	R26	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
28	R8, R11, R14, R15, R22, R58, R73, R590	RM73B2A151J RN Resistor (CP)	323A5003J0151	8	
29					
30	R533	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
31	R624	RM73B2A182J RN Resistor (CP)	323A5003J0182	1	
32	R59, R66, R531, R532, R568	RM73B2A202J RN Resistor (CP)	323A5003J0202	5	
33	R552-R559	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	
34	R61	RM73B2A225J RN Resistor (CP)	323A5003J0225	1	

OLCL-Printed Circuit Board (Main Control Board)
(4YA4121-1046G11 - 2/2 - 3/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R6, R7, R9, R10, R12, R13, R18-R20, R91, R92, R523,	RM73B2A241J RN Resistor (CP)	323A5003J0241	16	
36	R524, R534, R535, R579				
37					
38	R16, R25, R46, R54, R55, R74, R81	RM73B2A272J RN Resistor (CP)	323A5003J0272	7	
39					
40	R622	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
41	R625	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
42	R17, R28-R30, R511-R515	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
43	R32-R34, R56, R57, R77, R503, R504	RM73B2A332J RN Resistor (CP)	323A5003J0332	8	
44					
45	R27, R31, R578	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
46	R574	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
47	R93, R505, R526, R527, R570, R572	RM73B2A472J RN Resistor (CP)	323A5003J0472	6	
48					
49	R70, R72	RM73B2A560J RN Resistor (CP)	323A5003J0560	2	
50	R609-R612, R623	RM73B2A561J RN Resistor (CP)	323A5003J0561	5	
51	R502, R506	RM73B2A562J RN Resistor (CP)	323A5003J0562	2	

OLCL-Printed Circuit Board (Main Control Board)
(4YA4121-1046G11 - 2/2 - 4/7)

REF. NO.	SYMBOL	TYPE/NAME		PART NO.	Q'TY	REMARKS
52	R78	RM73B2A564J RN Resistor (CP)		323A5003J0564	1	
53	R40-R45	RM73B2A621J RN Resistor (CP)		323A5003J0621	6	
54	R21	RM73B2A680J RN Resistor (CP)		323A5003J0680	1	
55	R24, R53	RM73B2A681J RN Resistor (CP)		323A5003J0681	2	
56	R508, R509	RM73B2A752J RN Resistor (CP)		323A5003J0752	2	
57	R23, R522, R525, R528, R577, R618, R619, R621, C12,	2125JPW Chip jumper (CP)		323A5003P0001	10	
58	C545					
59	R87-R90	MSF1/2B2ΩJ RS Resistor		324A1001J0209	4	
60	R4, R5, R519, R520	MNR-34J101 Block resistor (CP)		334A5003J0101	4	
61	R1-R3, R516-R518	MNR-34J151 Block resistor (CP)		334A5003J0151	6	
62	RM1, RM2	MRM-8-332JA Block resistor (CP)		334A3268J0332	2	
63						
64	C526	CC2012SL1H561J CC Capacitor (CP)	50V	303A3007K0561	1	
65	C503	CC2012SL1H681J CC Capacitor (CP)	50V	303A3007K0681	1	
66	C15, C16, C509, C512, C517, C520, C527	CK2012B1H102K CK Capacitor (CP)	50V	303A6008K3102	7	
67						
68	C14	CK2012F1H103Z CK Capacitor (CP)	50V	303A6008Z3103	1	

OLCL-Printed Circuit Board (Main Control Board)
(4YA4121-1046G11 - 2/2 - 5/7)

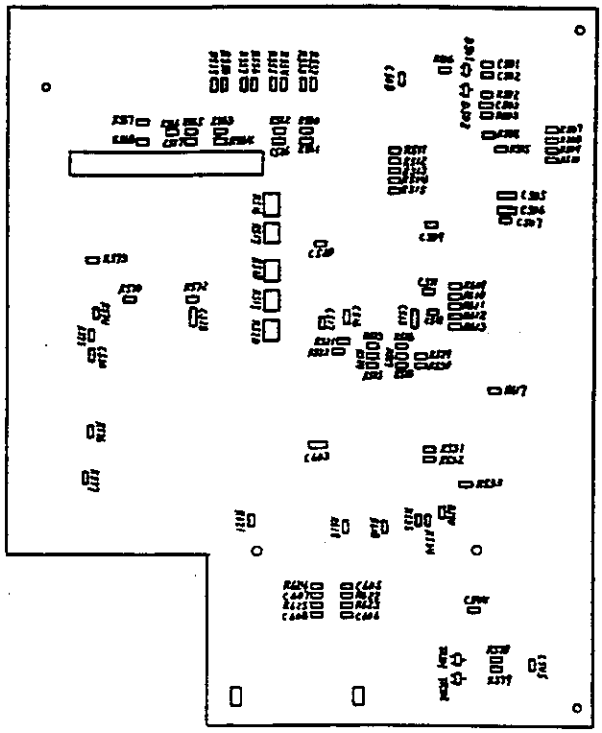
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69 70 71	C13, C18, C25, C26, C501, C502, C507, C508, C511, C516, C530, C544, C605-C608	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	16	
72	C505, C506, C513, C528, C603	CK3216F1C105Z 16V CK Capacitor (CP) 1μF	303A6009Z1105	5	
73	C3	SXE16VB-220 16V CE Capacitor 220μF	304A1034C1221	1	
74	C8	KME50VB-47 50V CE Capacitor 47μF	304A1115H1470	1	
75	C5	UVS1A332MRA 10V CE Capacitor 3300μF	304A1137A1332	1	
76					
77	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	
78	Q2	MSM538022C-51GS-K MOS-MROM (SO)	817A3625N0002	1	
79	Q5	514260JP-80 MOS-D-RAM (SO)	802A0003N2602	1	
80	Q7	ECN1362SP1 BIP Linear IC	720A1821M0005	1	
81	Q8	7407FP BIP Digital IC (SO)	700A0003N0007	1	
82	Q9	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
83	Q10	93LC46A-NW MOS-EEPROM	816A0303M0000	1	
84	Q11	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
85	TR501, TR502	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	2	

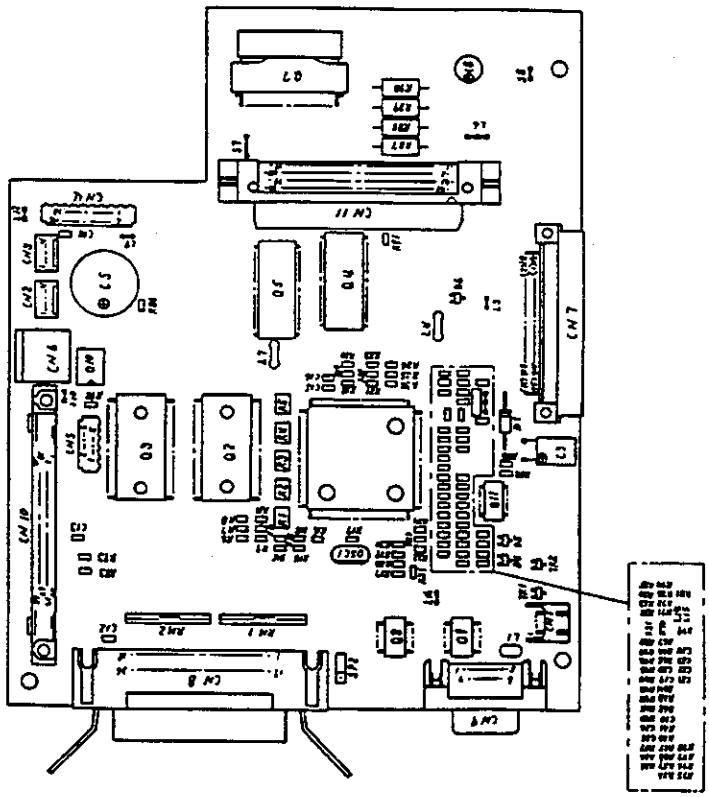
OLCL-Printed Circuit Board (Main Control Board)
(4YA4121-1046G11 - 2/2 - 6/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	TR1	2SA1338 PNP-HF-TR (CP)	600A1032N0010	1	
87	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
88					
89	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
90	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
91	CN4	ZC-014 PC Connector	224A3590P0140	1	
92	CN5	ZC-006 PC Connector	224A3590P0060	1	
93	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
94	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	
95	CN8	57RE-40360-730B-D29 Square-shaped connector	220A1783P0362	1	
96	CN9	DELC-J9PAF-21L9 Square-shaped connector	220A1376P0095	1	
97	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
98	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
99	SP2	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
100	2	IMSA-9206H-GF PC Connector	224A4080P0020	1	
101					
102	S8, L3, L9, L10, L12, L16	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	6	

OLCL-Printed Circuit Board (Main Control Board)
(4YA4121-1046G11 - 2/2 - 7/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	S7, L6, L15	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	3	
104	L4, L7	DSS306-0AE222Z EMI Filter	342A1009P2222	2	
105	L14	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
106	L1	ZBF253D-01 Beads filter	377A1115P1309	1	
107	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
108					
109	3	Screw (with pan-head SW+W)	+P(SW+W) 2.5-8-HHC	2	
110	4	Nut	3N2.5-HH	2	
111	5	Pressure spring	4PP4083-6254P001	1	
112					





OLCL-3-Printed Circuit Board (Main Control Board)
(4YA4121-1046G13-1/2)

OLCL-3-Printed Circuit Board (Main Control Board)
(4YA4121-1046G13 - 2/2 - 1/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D6	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	1	
5	D5, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	2	
6	D1	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D4	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R35	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
10	R76	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	
11	R84	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
12	R62	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
13	R37	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
14	R60, R617	RM73B2A242F RN Resistor (CP)	323A5003F0242	2	
15	R530	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
16	R529	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R75	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

OLCL-3-Printed Circuit Board (Main Control Board)
(4YA4121-1046G13 - 2/2 - 2/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R85	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R36	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
20	R51, R71, R561, R613	RM73B2A101J RN Resistor (CP)	323A5003J0101	4	
21	R47, R48, R67, R79, R83, R510, R560, R562-R564, R567,	RM73B2A102J RN Resistor (CP)	323A5003J0102	13	
22	R573, R576				
23					
24	R63, R64, R507, R521, R565, R566	RM73B2A103J RN Resistor (CP)	323A5003J0103	6	
25					
26	R65, R86, R575	RM73B2A112J RN Resistor (CP)	323A5003J0112	3	
27	R26	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
28	R8, R11, R14, R15, R22, R58, R73, R590	RM73B2A151J RN Resistor (CP)	323A5003J0151	8	
29					
30	R533	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
31	R624	RM73B2A182J RN Resistor (CP)	323A5003J0182	1	
32	R59, R66, R531, R532, R568	RM73B2A202J RN Resistor (CP)	323A5003J0202	5	
33	R552-R559	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	
34	R61	RM73B2A225J RN Resistor (CP)	323A5003J0225	1	

OLCL-3-Printed Circuit Board (Main Control Board)
(4YA4121-1046G13 - 2/2 - 3/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R6, R7, R9, R10, R12, R13, R18-R20, R19, R92, R523,	RM73B2A241J RN Resistor (CP)	323A5003J0241	16	
36	R524, R534, R535, R579				
37					
38	R16, R25,M R46, R54, R55, R74, R81	RM73B2A272J RN Resistor (CP)	323A5003J0272	7	
39					
40	R622	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
41	R625	RM73B2A302J RN Resistor (CP)	323A5003J0302	1	
42	R17, R28-R30, R511-R515	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
43	R32-R34, R56, R57, R77, R503, R504	RM73B2A332J RN Resistor (CP)	323A5003J0332	8	
44					
45	R27, R31, R578	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
46	R574	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
47	R93, R505, R526, R527, R570, R572	RM73B2A472J RN Resistor (CP)	323A5003J0472	6	
48					
49	R70, R72	RM73B2A560J RN Resistor (CP)	323A5003J0560	2	
50	R609-R612, R623	RM73B2A561J RN Resistor (CP)	323A5003J0561	5	
51	R502, R506	RM73B2A562J RN Resistor (CP)	323A5003J0562	2	

OLCL-3-Printed Circuit Board (Main Control Board)
(4YA4121-1046G13 - 2/2 - 4/7)

REF. NO.	SYMBOL	TYPE/NAME		PART NO.	Q'TY	REMARKS
52	R78	RM73B2A564J RN Resistor (CP)		323A5003J0564	1	
53	R40-R45	RM73B2A621J RN Resistor (CP)		323A5003J0621	6	
54	R21	RM73B2A680J RN Resistor (CP)		323A5003J0680	1	
55	R24, R53	RM73B2A681J RN Resistor (CP)		323A5003J0681	2	
56	R508, R509	RM73B2A752J RN Resistor (CP)		323A5003J0752	2	
57	R23, R522, R525, R528, R577, R618, R619, R621, C12,	2125JPW Chip jumper (CP)		323A5003P0001	10	
58	C545					
59	R87-R90	MSF1/2B2ΩJ RS Resistor		324A1001J0209	4	
60	R4, R5, R519, R520	MNR-34J101 Block resistor (CP)		334A5003J0101	4	
61	R1-R3, R516-R518	MNR-34J151 Block resistor (CP)		334A5003J0151	6	
62	RM1, RM2	MRM-8-332JA Block resistor (CP)		334A3268J0332	2	
63						
64	C526	CC2012SL1H561J CC Capacitor (CP)	50V	303A3007K0561	1	
65	C503	CC2012SL1H681J CC Capacitor (CP)	50V	303A3007K0681	1	
66	C15, C16, C509, C512, C517, C520, C527	CK2012B1H102K CK Capacitor (CP)	50V	303A6008K3102	7	
67						
68	C14	CK2012F1H103Z CK Capacitor (CP)	50V	303A6008Z3103	1	

OLCL-3-Printed Circuit Board (Main Control Board)
(4YA4121-1046G13 - 2/2 - 5/7)

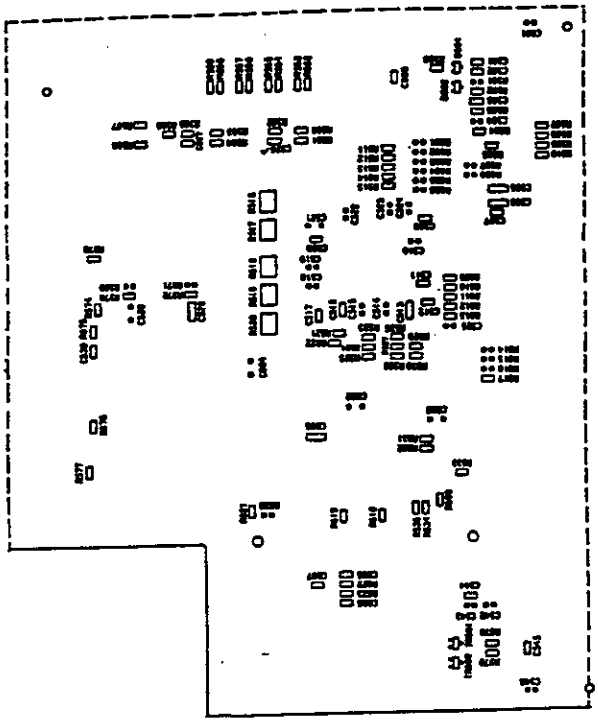
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69 70 71	C13, C18, C25, C26, C501, C502, C507, C508, C511, C516, C530, C544, C605-C608	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	16	
72	C505, C506, C513, C528, C603	CK3216F1C105Z 16V CK Capacitor (CP) 1μF	303A6009Z1105	5	
73	C3	SXE16VB-220 16V CE Capacitor 220μF	304A1034C1221	1	
74	C8	KME50VB-47 50V CE Capacitor 47μF	304A1115H1470	1	
75	C5	UVS1A332MRA 10V CE Capacitor 3300μF	304A1137A1332	1	
76					
77	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	
78	Q2	MSM531622C-D2GS-K MOS-MROM (SO)	817A4621N0001	1	
79	Q3	MSM538022C-07GS-K MOS-MROM (SO)	817A3625N0001	1	
80	Q4, Q5	514260JP-80 MOS-D-RAM (SO)	802A0003N2602	2	
81	Q7	ECN1362SP1 BIP Linear IC	720A1821M0005	1	
82	Q8	7407FP BIP Digital IC (SO)	700A0003N0007	1	
83	Q9	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
84	Q10	93LC46A-NW MOS-EEPROM	816A0303M0000	1	
85	Q11	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	

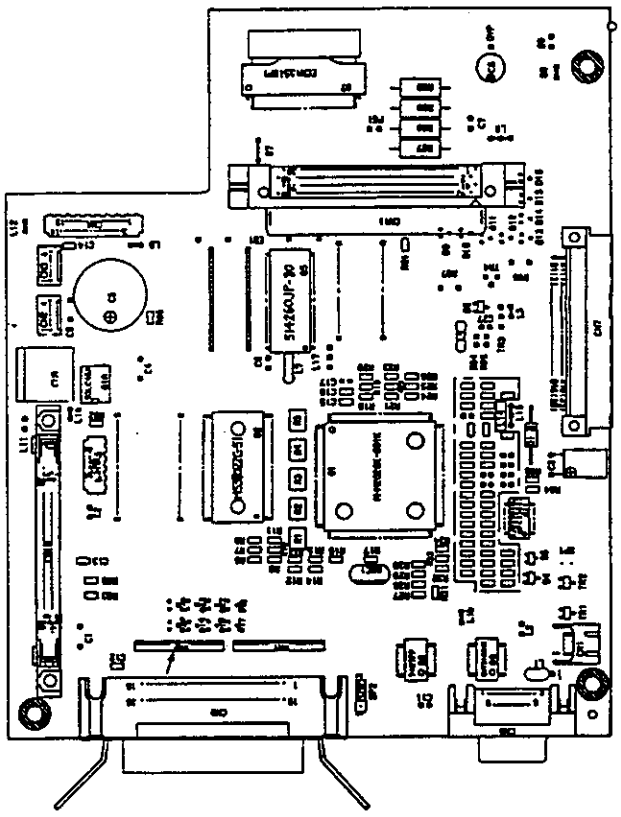
OLCL-3-Printed Circuit Board (Main Control Board)
(4YA4121-1046G13 - 2/2 - 6/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	TR501, TR502	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	2	
87	TR1	2SA1338 PNP-HF-TR (CP)	600A1032N0010	1	
88	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
89					
90	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
91	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
92	CN4	ZC-014 PC Connector	224A3590P0140	1	
93	CN5	ZC-006 PC Connector	224A3590P0060	1	
94	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
95	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	
96	CN8	57RE-40360-730B-D29 Square-shaped connector	220A1783P0362	1	
97	CN9	DELC-J9PAF-21L9 Square-shaped connector	220A1376P0095	1	
98	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
99	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
100	SP2	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
101	2	IMSA-9206H-GF PC Connector	224A4080P0020	1	
102					

OLCL-3-Printed Circuit Board (Main Control Board)
(4YA4121-1046G13 - 2/2 - 7/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	S8, L3, L9, L10, L12, L16	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	6	
104	S7, L6, L15	Short wire (U-type) P=5.0	5KH-31036-50	3	
105	L4, L7	DSS306-0AE222Z EMI Filter	342A1009P2222	2	
106	L14	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
107	L1	ZBF253D-01 Beads filter	377A1115P1309	1	
108	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
109					
110	3	Screw (with pan-head SW+W)	+P(SW+W) 2.5-8-HHC	2	
111	4	Nut	3N2.5-HH	2	
112	5	Pressure spring	4PP4083-6254P001	1	





OLCE-Printed Circuit Board (Main Control Board)
(4YA4121-1038G11-1/2)

OLCE-Printed Circuit Board (Main Control Board)
(4YA4121-1038G11 - 2/2 - 1/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D6	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	1	
5	D5, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	2	
6	D1	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	1	
7	D4	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R35	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
10	R76	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	
11	R84	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
12	R62	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
13	R37	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
14	R60, R617	RM73B2A242F RN Resistor (CP)	323A5003F0242	2	
15	R530	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
16	R529	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R75	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

OLCE-Printed Circuit Board (Main Control Board)
(4YA4121-1038G11 - 2/2 - 2/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R85	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R36	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
20	R51, R71, R561, R613	RM73B2A101J RN Resistor (CP)	323A5003J0101	4	
21	R47, R48, R67, R79, R83, R510, R560, R562-R564, R567,	RM73B2A102J RN Resistor (CP)	323A5003J0102	13	
22	R573, R576				
23					
24	R63, R64, R507, R521, R565, R566	RM73B2A103J RN Resistor (CP)	323A5003J0103	6	
25					
26	R65, R86, R575	RM73B2A112J RN Resistor (CP)	323A5003J0112	3	
27	R26	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
28	R8, R11, R14, R15, R22, R58, R73, R590	RM73B2A151J RN Resistor (CP)	323A5003J0151	8	
29					
30	R533	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
31	R59, R66, R531, R532, R568	RM73B2A202J RN Resistor (CP)	323A5003J0202	5	
32	R552-R559	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	
33	R61	RM73B2A225J RN Resistor (CP)	323A5003J0225	1	
34	R6, R7, R9, R10, R12, R13, R18	RM73B2A241J RN Resistor (CP)	323A5003J0241	16	

OLCE-Printed Circuit Board (Main Control Board)
(4YA4121-1038G11 - 2/2 - 3/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	-R20, R91, R92, R523, R524, R534, R535, R579				
36					
37	R16, R25,M R46, R54, R55, R74, R81	RM73B2A272J RN Resistor (CP)	323A5003J0272	7	
38					
39	R622	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
40	R17, R28-R30, R511-R515	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
41	R32-R34, R56, R57, R77, R503, R504	RM73B2A332J RN Resistor (CP)	323A5003J0332	8	
42					
43	R27, R31, R578	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
44	R574	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
45	R93, R505, R526, R527, R570, R572	RM73B2A472J RN Resistor (CP)	323A5003J0472	6	
46					
47	R70, R72	RM73B2A560J RN Resistor (CP)	323A5003J0560	2	
48	R609-R612, R623	RM73B2A561J RN Resistor (CP)	323A5003J0561	5	
49	R502, R506	RM73B2A562J RN Resistor (CP)	323A5003J0562	2	
50	R78	RM73B2A564J RN Resistor (CP)	323A5003J0564	1	
51	R40-R45	RM73B2A621J RN Resistor (CP)	323A5003J0621	6	

OLCE-Printed Circuit Board (Main Control Board)
(4YA4121-1038G11 - 2/2 - 4/7)

REF. NO.	SYMBOL	TYPE/NAME		PART NO.	Q'TY	REMARKS
52	R21	RM73B2A680J RN Resistor (CP)		323A5003J0680	1	
53	R24, R53	RM73B2A681J RN Resistor (CP)		323A5003J0681	2	
54	R508, R509	RM73B2A752J RN Resistor (CP)		323A5003J0752	2	
55	R23, R522, R525, R528, R577, R618, R619, R621, C12,	2125JPW Chip jumper (CP)		323A5003P0001	10	
56	C545					
57	R87-R90	MSF1/2B2ΩJ RS Resistor		324A1001J0209	4	
58	R4, R5, R519, R520	MNR34J101 Block resistor (CP)		334A5003J0101	4	
59	R1-R3, R516-R518	MNR34J151 Block resistor (CP)		334A5003J0151	6	
60	RM1, RM2	MRM-8-332JA Block resistor		334A3268J0332	2	
61						
62	C526	CC2012SL1H561J CC Capacitor (CP)	50V	303A3007K0561	1	
63	C503	CC2012SL1H681J CC Capacitor (CP)	50V	303A3007K0681	1	
64	C15, C16, C509, C512, C517, C520, C527	CK2012B1H102K CK Capacitor (CP)	50V	303A6008K3102	7	
65						
66	C14	CK2012F1H103Z CK Capacitor (CP)	50V	303A6008Z3103	1	
67	C13, C18, C25, C26, C501, C502, C507, C508, C511, C516,	CK2012F1E104Z CK Capacitor (CP)	25V	303A6008Z2104	15	
68	C530, C544, C605-C607					

OLCE-Printed Circuit Board (Main Control Board)
(4YA4121-1038G11 - 2/2 - 5/7)

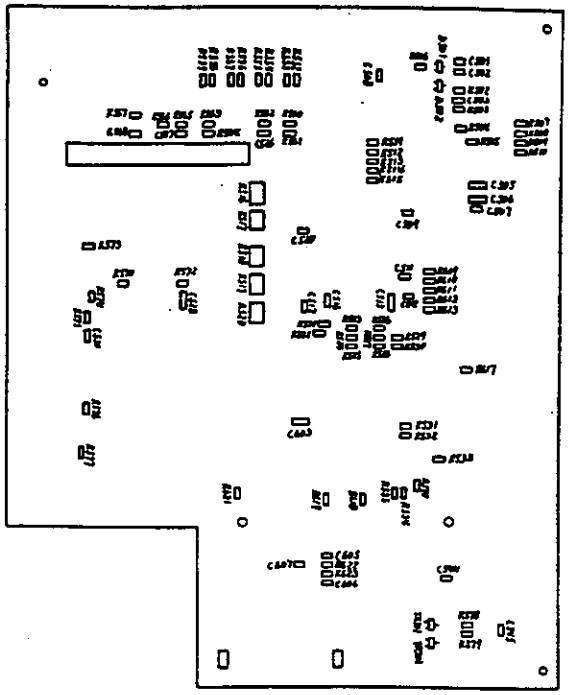
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69					
70	C505, C506, C513, C528, C603	CK3216F1C105Z 16V CK Capacitor (CP) 1μF	303A6009Z1105	5	
71	C3	SXE16VB-220 16V CE Capacitor 220μF	304A1034C1221	1	
72	C8	KME50VB-47 50V CE Capacitor 47μF	304A1115H1470	1	
73	C5	UVS1A332MRA 10V CE Capacitor 3300μF	304A1137A1332	1	
74					
75	Q1	MHM2028-001K MOS Digital IC (FP)	702A4771N0002	1	
76	Q2	MSM538022C-51GS-K MOS-MROM (SO)	817A3625N0002	1	
77	Q5	514260JP-80 MOS-D-RAM (SO)	802A0003N2602	1	
78	Q7	ECN1351SP1 BIP Linear IC	720A1821M0004	1	
79	Q8	7407FP BIP Digital IC (SO)	700A0003N0007	1	
80	Q9	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
81	Q10	93LC46A-NW MOS-EEPROM	816A0303M0000	1	
82	Q11	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
83					
84	TR501, TR502	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	2	
85	TR1	2SA1338 PNP-HF-TR (CP)	600A1032N0010	1	

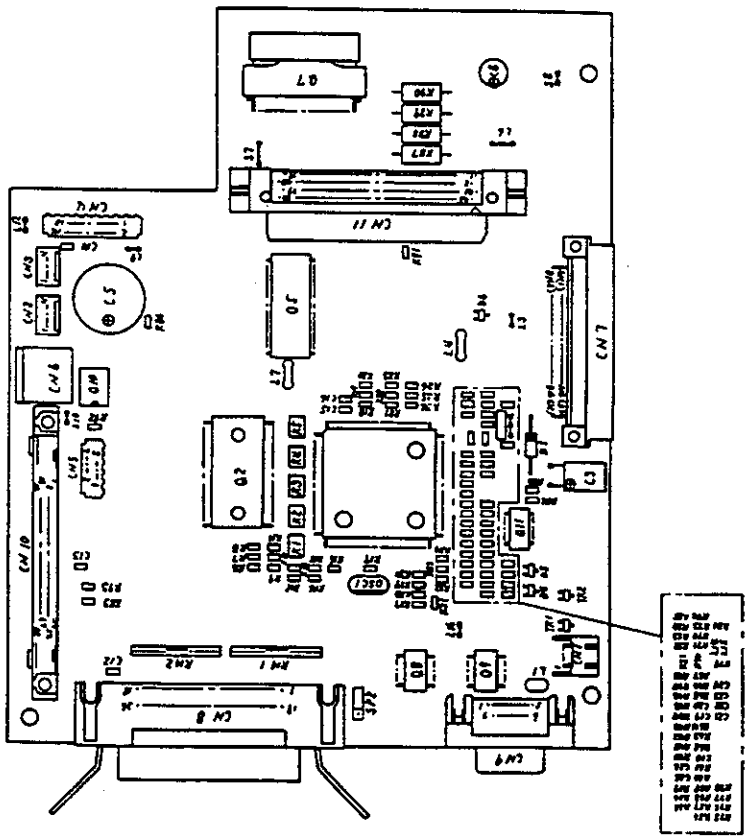
OLCE-Printed Circuit Board (Main Control Board)
(4YA4121-1038G11 - 2/2 - 6/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
87					
88	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
89	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
90	CN4	ZC-014 PC Connector	224A3590P0140	1	
91	CN5	ZC-006 PC Connector	224A3590P0060	1	
92	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
93	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	
94	CN8	57RE-40360-730B-D29 Square-shaped connector	220A1783P0362	1	
95	CN9	DELC-J9PAF-21L9 Square-shaped connector	220A1376P0095	1	
96	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
97	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
98	SP2	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
99	2	IMSA-9206H-GF PC Connector	224A4080P0020	1	
100					
101	S8, L3, L9, L10, L12, L16	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	6	
102	S7, L6, L15	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	3	

OLCE-Printed Circuit Board (Main Control Board)
(4YA4121-1038G11 - 2/2 - 7/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	L4, L7	DSS306-0AE222Z EMI Filter	342A1009P2222	2	
104	L14	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
105	L1	ZBF253D-01 Beads filter	377A1115P1309	1	
106	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
107					
108	3	Screw (with pan-head SW+W)	+P(SW+W) 2.5-8-HHC	2	
109	4	Nut	3N2.5-HH	2	
110	5	Pressure spring	4PP4083-6254P001	1	
111					
112					





OLCE-3-Printed Circuit Board (Main Control Board)
(4YA4121-1038G13-1/2)

OLCE-3-Printed Circuit Board (Main Control Board)
(4YA4121-1038G13 - 2/2 - 1/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D6	SB05-05CP Rectifier diode (CP)	610A0332N0001	1	
4	D502	SS100MA80VKCP Signal diode (CP)	611A0000N0002	1	
5	D5, D501	SS100MA80VACP Signal diode (CP)	611A0000N0001	2	
6	D1	EM01Z/SM1XN02/DSM1D2 Rectifier DI	610A0003M0001	1	
7	D4	RD15M-B2 Zener diode (CP)	613A0233M0222B	1	
8					
9	R35	RM73B2A102F RN Resistor (CP)	323A5003F0102	1	
10	R76	RM73B2A105F RN Resistor (CP)	323A5003F0105	1	
11	R84	RM73B2A202F RN Resistor (CP)	323A5003F0202	1	
12	R62	RM73B2A222F RN Resistor (CP)	323A5003F0222	1	
13	R37	RM73B2A241F RN Resistor (CP)	323A5003F0241	1	
14	R60, R617	RM73B2A242F RN Resistor (CP)	323A5003F0242	2	
15	R530	RM73B2A243F RN Resistor (CP)	323A5003F0243	1	
16	R529	RM73B2A362F RN Resistor (CP)	323A5003F0362	1	
17	R75	RM73B2A392F RN Resistor (CP)	323A5003F0392	1	

OLCE-3-Printed Circuit Board (Main Control Board)
(4YA4121-1038G13 - 2/2 - 2/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	R85	RM73B2A393F RN Resistor (CP)	323A5003F0393	1	
19	R36	RM73B2A681F RN Resistor (CP)	323A5003F0681	1	
20	R51, R71, R561, R613	RM73B2A101J RN Resistor (CP)	323A5003J0101	4	
21	R47, R48, R67, R79, R83, R510, R560, R562-R564, R567,	RM73B2A102J RN Resistor (CP)	323A5003J0102	13	
22	R573, R576				
23					
24	R63, R64, R507, R521, R565, R566	RM73B2A103J RN Resistor (CP)	323A5003J0103	6	
25					
26	R65, R86, R575	RM73B2A112J RN Resistor (CP)	323A5003J0112	3	
27	R26	RM73B2A122J RN Resistor (CP)	323A5003J0122	1	
28	R8, R11, R14, R15, R22, R58, R73, R590	RM73B2A151J RN Resistor (CP)	323A5003J0151	8	
29					
30	R533	RM73B2A153J RN Resistor (CP)	323A5003J0153	1	
31	R59, R66, R531, R532, R568	RM73B2A202J RN Resistor (CP)	323A5003J0202	5	
32	R552-R559	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	
33	R61	RM73B2A225J RN Resistor (CP)	323A5003J0225	1	
34	R6, R7, R9, R10, R12, R13, R18	RM73B2A241J RN Resistor (CP)	323A5003J0241	16	

OLCE-3-Printed Circuit Board (Main Control Board)
(4YA4121-1038G13 - 2/2 - 3/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	-R20, R91, R92, R523, R524, R534, R535, R579				
36					
37	R16, R25,M R46, R54, R55, R74, R81	RM73B2A272J RN Resistor (CP)	323A5003J0272	7	
38					
39	R622	RM73B2A301J RN Resistor (CP)	323A5003J0301	1	
40	R17, R28-R30, R511-R515	RM73B2A331J RN Resistor (CP)	323A5003J0331	9	
41	R32-R34, R56, R57, R77, R503, R504	RM73B2A332J RN Resistor (CP)	323A5003J0332	8	
42					
43	R27, R31, R578	RM73B2A431J RN Resistor (CP)	323A5003J0431	3	
44	R574	RM73B2A471J RN Resistor (CP)	323A5003J0471	1	
45	R93, R505, R526, R527, R570, R572	RM73B2A472J RN Resistor (CP)	323A5003J0472	6	
46					
47	R70, R72	RM73B2A560J RN Resistor (CP)	323A5003J0560	2	
48	R609-R612, R623	RM73B2A561J RN Resistor (CP)	323A5003J0561	5	
49	R502, R506	RM73B2A562J RN Resistor (CP)	323A5003J0562	2	
50	R78	RM73B2A564J RN Resistor (CP)	323A5003J0564	1	
51	R40-R45	RM73B2A621J RN Resistor (CP)	323A5003J0621	6	

OLCE-3-Printed Circuit Board (Main Control Board)
(4YA4121-1038G13 - 2/2 - 4/7)

REF. NO.	SYMBOL	TYPE/NAME		PART NO.	Q'TY	REMARKS
52	R21	RM73B2A680J RN Resistor (CP)		323A5003J0680	1	
53	R24, R53	RM73B2A681J RN Resistor (CP)		323A5003J0681	2	
54	R508, R509	RM73B2A752J RN Resistor (CP)		323A5003J0752	2	
55	R23, R522, R525, R528, R577, R618, R619, R621, C12,	2125JPW Chip jumper (CP)		323A5003P0001	10	
56	C545					
57	R87-R90	MSF1/2B2ΩJ RS Resistor		324A1001J0209	4	
58	R4, R5, R519, R520	MNR34J101 Block resistor (CP)		334A5003J0101	4	
59	R1-R3, R516-R518	MNR34J151 Block resistor (CP)		334A5003J0151	6	
60	RM1, RM2	MRM-8-332JA Block resistor (CP)		334A3268J0332	2	
61						
62	C526	CC2012SL1H561J CC Capacitor (CP)	50V	303A3007K0561	1	
63	C503	CC2012SL1H681J CC Capacitor (CP)	50V	303A3007K0681	1	
64	C15, C16, C509, C512, C517, C520, C527	CK2012B1H102K CK Capacitor (CP)	50V	303A6008K3102	7	
65						
66	C14	CK2012F1H103Z CK Capacitor (CP)	50V	303A6008Z3103	1	
67	C13, C18, C25, C26, C501, C502, C507, C508, C511, C516,	CK2012F1E104Z CK Capacitor (CP)	25V	303A6008Z2104	15	
68	C530, C544, C605-C607					

OLCE-3-Printed Circuit Board (Main Control Board)
(4YA4121-1038G13 - 2/2 - 5/7)

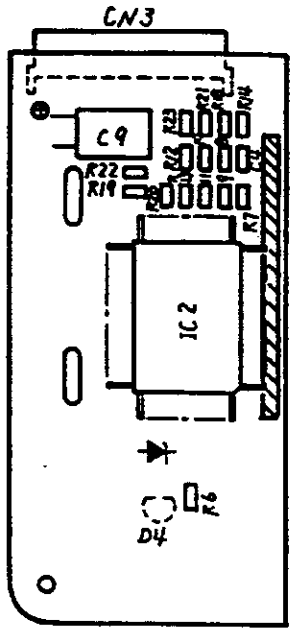
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69					
70	C505, C506, C513, C528, C603	CK3216F1C105Z 16V CK Capacitor (CP) 1μF	303A6009Z1105	5	
71	C3	SXE16VB-220 16V CE Capacitor 220μF	304A1034C1221	1	
72	C8	KME50VB-47 50V CE Capacitor 47μF	304A1115H1470	1	
73	C5	UVS1A332MRA 10V CE Capacitor 3300μF	304A1137A1332	1	
74					
75	Q1	MHM2028K-001K MOS Digital IC (FP)	702A4771N0002	1	
76	Q2	MSM531622C-D2GS-K MOS-MROM (SO)	817A4621N0001	1	
77	Q3	MSM538022C-07GS-K MOS-MROM (SO)	817A3625N0001	1	
78	Q4, Q5	514260JP-80 MOS-D-RAM (SO)	802A0003N2602	2	
79	Q7	ECN1351SP1 BIP Linear IC	720A1821M0004	1	
80	Q8	7407FP BIP Digital IC (SO)	700A0003N0007	1	
81	Q9	SN75188NS BIP-INF-IC (SO)	710A0050N0188	1	
82	Q10	93LC46A-NW MOS-EEPROM	816A0303M0000	1	
83	Q11	NJM2901M/UPC339G2 BIP Linear IC (SO)	720A0503N0007	1	
84					
85	TR501, TR502	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	2	

OLCE-3-Printed Circuit Board (Main Control Board)
(4YA4121-1038G13 - 2/2 - 6/7)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	TR1	2SA1338 PNP-HF-TR (CP)	600A1032N0010	1	
87	TR2	DTC123YK NPN-HF-TR (CP)	602A1035N0019	1	
88					
89	CN1	S3B-XH-A PC Connector	224A3528P0030	1	
90	CN2, CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	2	
91	CN4	ZC-014 PC Connector	224A3590P0140	1	
92	CN5	ZC-006 PC Connector	224A3590P0060	1	
93	CN6	TCS7597-01-401 Round-shaped connector	221A1630P0081	1	
94	CN7	00-8272-232-001-112 PC Connector	224A3368P0320	1	
95	CN8	57RE-40360-730B-D29 Square-shaped connector	220A1783P0362	1	
96	CN9	DELC-J9PAF-21L9 Square-shaped connector	220A1376P0095	1	
97	CN10	JEIDA-V4MC68STK PC Connector	224A0121P0680	1	
98	CN11	PQ80A2FA PC Connector	224A3516P0800	1	
99	SP2	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	1	
100	2	IMSA-9206H-GF PC Connector	224A4080P0020	1	
101					
102	S8, L3, L9, L10, L12, L16	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	6	

OLCE-3-Printed Circuit Board (Main Control Board)
(4YA4121-1038G13 - 2/2 - 7/7)

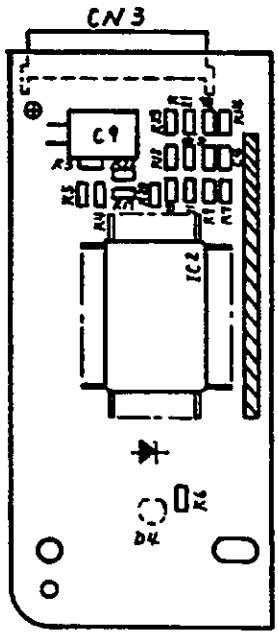
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103	S7, L6, L15	Short wire (U-type) P=5.0	5KH-31036-50	3	
104	L4, L7	DSS306-0AE222Z EMI Filter	342A1009P2222	2	
105	L14	ZJSC-R47-181 EMI Filter	342A1012P1181	1	
106	L1	ZBF253D-01 Beads filter	377A1115P1309	1	
107	OSC1	CST15.97MXW040 Ceramic oscillator	381A1047B0004	1	
108					
109	3	Screw (with pan-head SW+W)	+P(SW+W) 2.5-8-HHC	2	
110	4	Nut	3N2.5-HH	2	
111	5	Pressure spring	4PP4083-6254P001	1	
112					



OLLB-Printed Circuit Board (Operator Panel 1/2) Rev. 3
(4YA4087-1027G1 - 1/2)

OLLB-Printed Circuit Board (Operator Panel 1/2) Rev. 3
(4YA4087-1027G1 - 2/2-1/1)

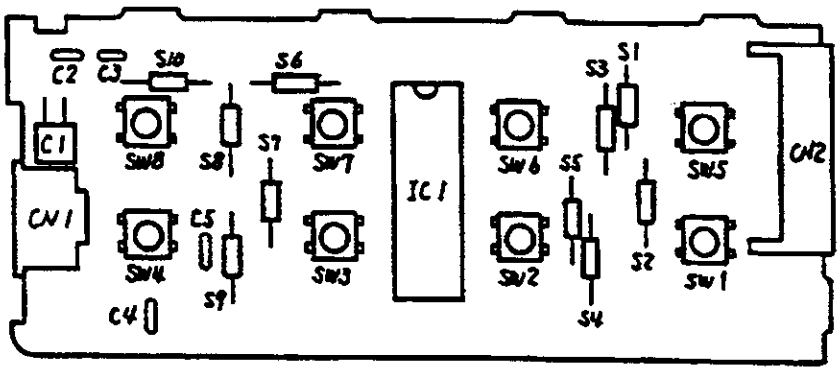
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D4	SEL3410G-YZ LED	650A0329M0018	1	
2	C4	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	1	
3	C9	CEUSM1A101 10V CE Capacitor 100μF	304A1041A1101	1	
4	R6	RM73B2A181J RN Resistor (CP)	323A5003J0181	1	
5	R7	RM73B2A913F RN Resistor (CP)	323A5003F0913	1	
6	R8, R9, R10, R11, R12	RM73B2A752J RN Resistor (CP)	323A5003J0752	5	
7	R13	RM73B2A682J RN Resistor (CP)	323A5003J0682	1	
8	R14	RM73B2A152J RN Resistor (CP)	323A5003J0152	1	
9	R18, R19, R20, R21	RM73B2A103J RN Resistor (CP)	323A5003J0103	4	
10	R22, R23	RM73B2A562J RN Resistor (CP)	323A5003J0562	2	
11	IC2	HD44780 CPU-INF-IC (FP)	855A0421N0059	1	
12	CN3	10JQ-ST PC Connector	224A4123P0100	1	



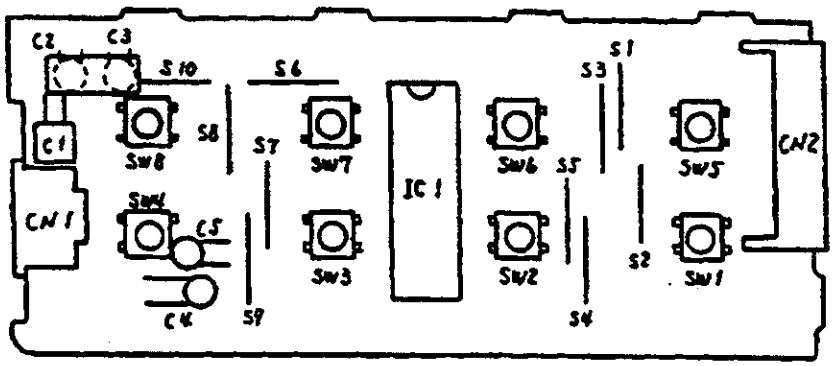
OLLB-Printed Circuit Board (Operator Panel 1/2) Rev. 4
(4YA4087-1027G1 - 1/2)

OLLB-Printed Circuit Board (Operator Panel 1/2) Rev. 4
(4YA4087-1027G1 - 2/2 - 1/1)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	D4	SEL3410G-YZ LED	650A0329M0018	1	
2	C4	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	1	
3	C9	CEUSM1A101 10V CE Capacitor 100μF	304A1041A1101	1	
4	R3, R4, R5	RM73B2A201J RN Resistor (CP)	323A5003J0201	3	
5	R6	RM73B2A181J RN Resistor (CP)	323A5003J0181	1	
6	R7	RM73B2A913F RN Resistor (CP)	323A5003F0913	1	
7	R8, R9, R10, R11, R12	RM73B2A752J RN Resistor (CP)	323A5003J0752	5	
8	R13	RM73B2A682J RN Resistor (CP)	323A5003J0682	1	
9	R14, R18, R19, R20, R21, R22, R23	RM73B2A103J RN Resistor (CP)	323A5003J0103	7	
10	IC2	HD44780 CPU-INF-IC (FP)	855A0421N0059	1	
	CN3	10JQ-ST PC Connector	224A4123P0100	1	



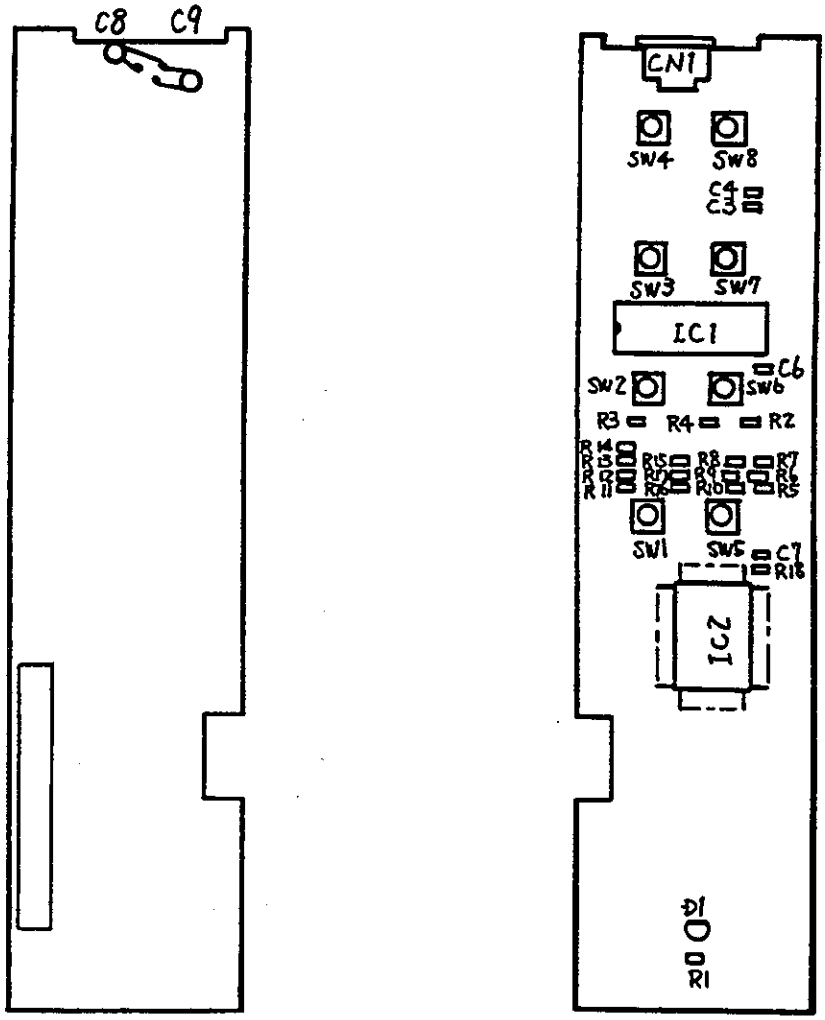
OLLB-Printed Circuit Board (Operator Panel 2/2) Rev. 4
(4YA4087-1028G1 - 1/2)



OLLB-Printed Circuit Board (Operator Panel 2/2) Rev. 5
(4YA4087-1028G1 - 1/2)

OLLD-Printed Circuit Board (Operator Panel 2/2) Rev. 4 & 5
(4YA4087-1028G1 - 2/2 - 1/1)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	IC1	BU5148S MOS Digital IC	702A4733M0001	1	
2	C1	10MS5-33M 10V CE Capacitor 33µF	304A1046A1330	1	
3	C2, C3, C4, C5	TCK45B1H101KYA 50V CK Capacitor 100pF	302A4027K3101	4	C4, C5 REV. 4 only
4	SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8	SOA-113HS Push-button switch	205A1162P1001	8	
5	S1, S2, S3, S4, S5, S6, S7, S8, S9, S10	Short wire (U-type) 0.65 P=12.5	5KH-31036-125	10	
6	CN1	ZC-106 PC Connector	224A3591P0060	1	
7	CN2	S10B-XH-A PC Connector	224A3528P0100	1	
8	2	Wire	4YC4061-1026P001	1	REV. 5 only



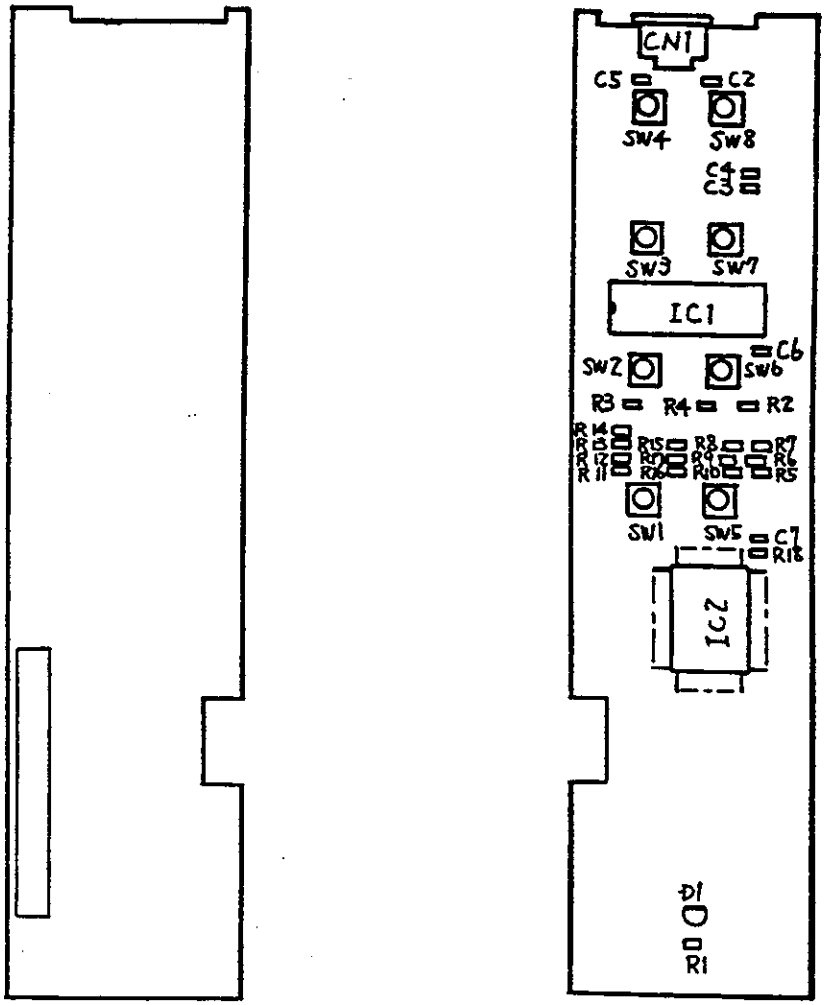
OLCC-Printed Circuit Board (Operator Panel) Rev.1
(4YA4130-1001G1 - 1/2)

OLCC-Printed Circuit Board (Operator Panel) Rev. 1
(4YA4130-1001G1 - 2/2 - 1/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D1	SEL3410G-YZ LED	650A0329M0018	5	
4					
5	C3, C4	CC2012CH1H101J 50V CC Capacitor (CP)	303A3007C0101	10	
6	C6, C7	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	10	
7	C8, C9	TCK45B1H101KYA 50V CK Capacitor 100pF	302A4027K3101	10	
8					
9	R1	RM73B2A181J RN Resistor (CP)	323A5003J0181	5	
10	R2, R3, R4	RM73B2A201J RN Resistor (CP)	323A5003J0201	15	
11	R5	RM73B2A682J RN Resistor (CP)	323A5003J0682	5	
12	R6, R7, R8, R9, R10	RM73B2A752J RN Resistor (CP)	323A5003J0752	25	
13	R11, R12, R13, R14, R15, R16, R17	RM73B2A103J RN Resistor (CP)	323A5003J0103	35	
14					
15	R18	RM73B2A913F RN Resistor (CP)	323A5003F0913	5	
16					

OLCC-Printed Circuit Board (Operator Panel) Rev. 1
(4YA4130-1001G1 - 2/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
17	IC1	BU5148S MOS Digital IC	702A4733M0001	5	
18	IC2	HD44780 CPU-INF-IC (FP)	855A0421N0059	5	
19					
20	SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8	SOR-113HS Push-button Switch	205A1165P1000	40	
21					
22					
23	CN1	ZC-106 PC Connector	224A3591P0060	5	



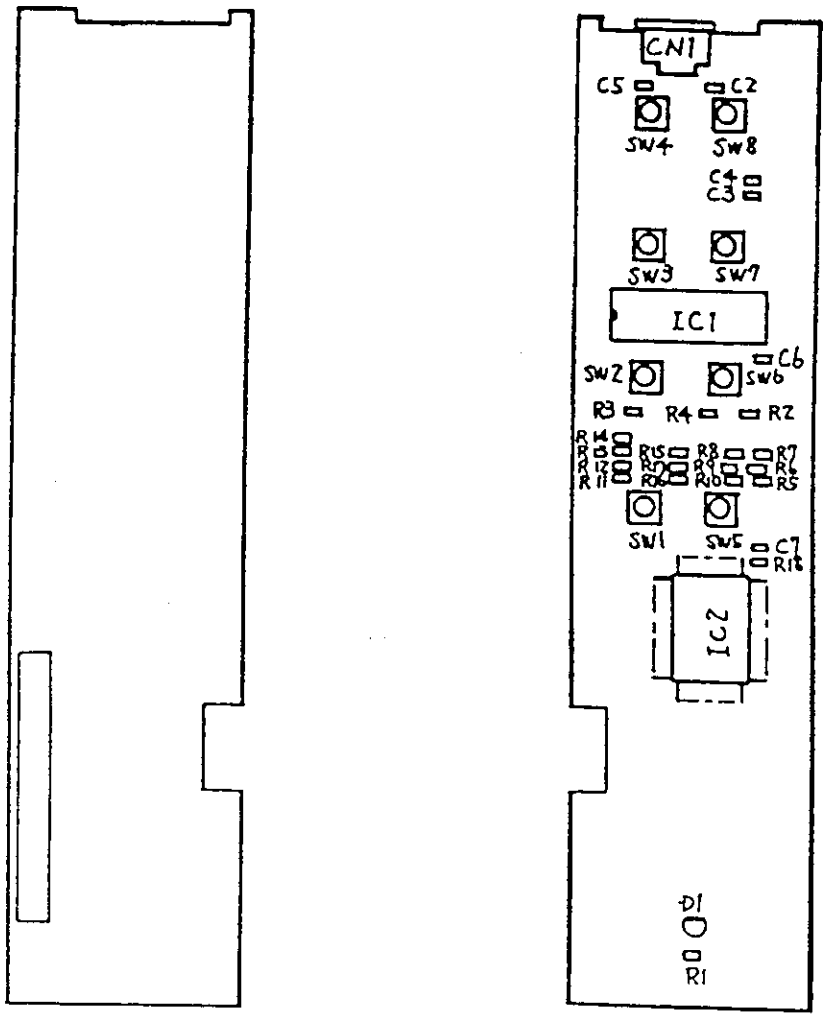
OLCC-Printed Circuit Board (Operator Panel) Rev. 2 & 3
(4YA4130-1001G1 - 1/2)

OLCC-Printed Circuit Board (Operator Panel) Rev. 2 & 3
(4YA4130-1001G1 -2/2 - 1/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D1	SEL3410G-YZ LED	650A0329M0018	5	
4					
5	C2, C3, C4, C5	CC2012CH1H101J 50V CC Capacitor (CP)	303A3007C0101	20	
6	C6, C7	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	10	
7					
8	R1	RM73B2A181J RN Resistor (CP)	323A5003J0181	5	
9	R2, R3, R4	RM73B2A201J RN Resistor (CP)	323A5003J0201	15	
10	R5	RM73B2A682J RN Resistor (CP)	323A5003J0682	5	
11	R6, R7, R8, R9, R10	RM73B2A752J RN Resistor (CP)	323A5003J0752	25	
12	R11, R12, R13, R14, R15, R16, R17	RM73B2A103J RN Resistor (CP)	323A5003J0103	35	
13					
14	R18	RM73B2A913F RN Resistor (CP)	323A5003F0913	5	
15					
16	IC1	BU5148S MOS Digital IC	702A4733M0001	5	

OLCC-Printed Circuit Board (Operator Panel) Rev. 2 & 3
(4YA4130-1001G1 -2/2 - 1/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
17	IC2	HD44780 CPU-INF-IC (FP)	855A0421N0059	5	
18					
19	SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8	SOR-113HS Push-button Switch	205A1165P1000	40	
20					
21					
22	CN1	ZC-106 PC Connector	224A3591P0060	5	



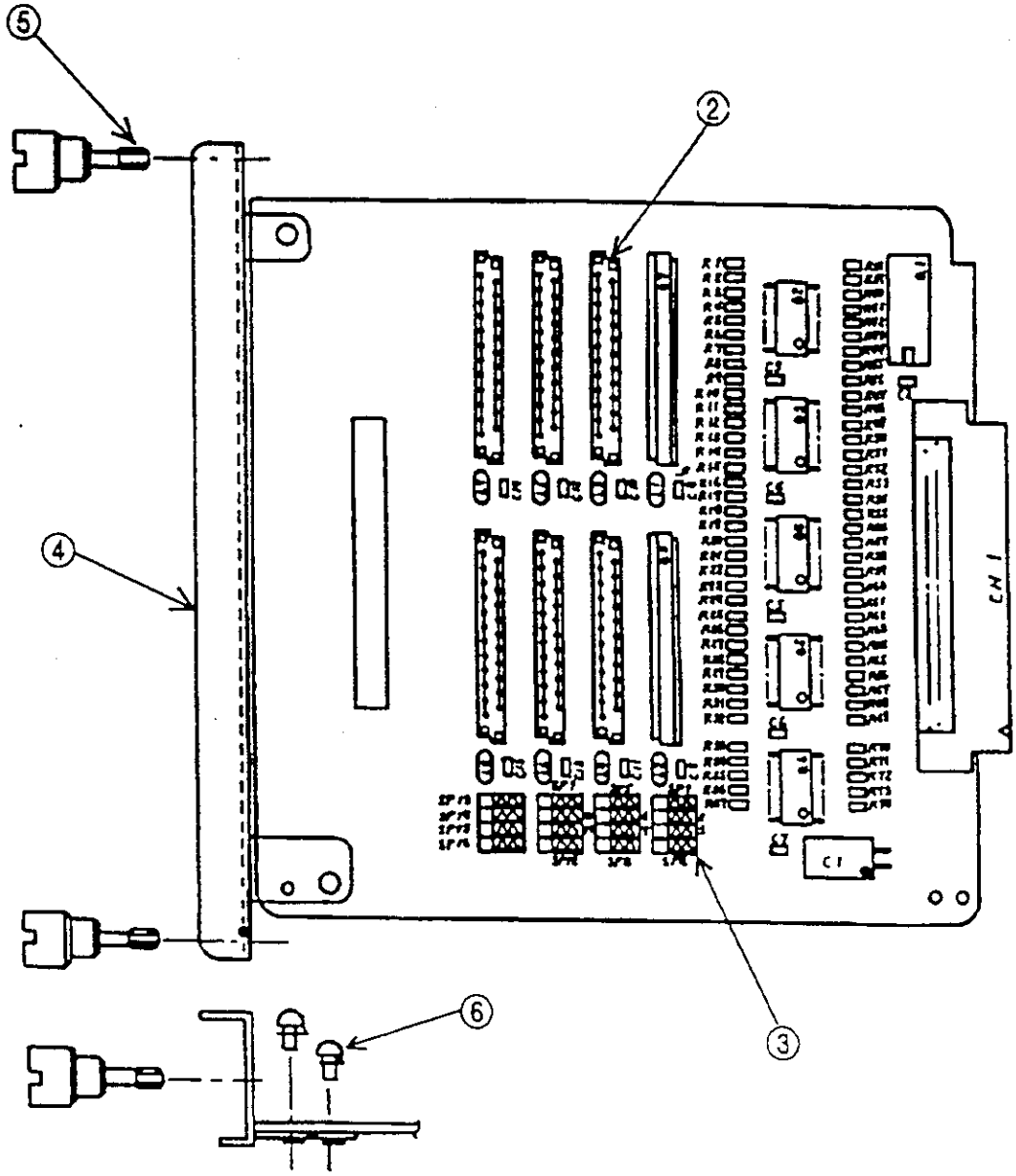
OLCC-Printed Circuit Board (Operator Panel) Rev. 4
(4YA4130-1001G1 - 1/2)

OLCC-Printed Circuit Board (Operator Panel) Rev. 4
(4YA4130-1001G1 - 2/2 - 1/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D1	SEL3410G-YZ LED	650A0329M0018	5	
4					
5	C2, C3, C4, C5	CC2012CH1H101J 50V CC Capacitor (CP)	303A3007C0101	20	
6	C6, C7	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	10	
7					
8	R1	RM73B2A181J RN Resistor (CP)	323A5003J0181	5	
9	R2, R3, R4	RM73B2A201J RN Resistor (CP)	323A5003J0201	15	
10	R5	RM73B2A682J RN Resistor (CP)	323A5003J0682	5	
11	R6, R7, R8, R9, R10	RM73B2A752J RN Resistor (CP)	323A5003J0752	25	
12	R11, R12, R13, R14, R15, R16, R17	RM73B2A103J RN Resistor (CP)	323A5003J0103	35	
13					
14	R18	RM73B2A913F RN Resistor (CP)	323A5003F0913	5	
15					
16	IC1	BU5148S MOS Digital IC	702A4733M0001	5	

OLCC-Printed Circuit Board (Operator Panel) Rev. 4
(4YA4130-1001G1 - 2/2 - 2/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
17	IC2	HD44780UA00FS CPU-INF-IC (FP)	855A0421N0001	5	
18					
19	SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8	SOR-113HS Push-button Switch	205A1165P1000	40	
20					
21					
22	CN1	ZC-106 PC Connector	224A3591P0060	5	



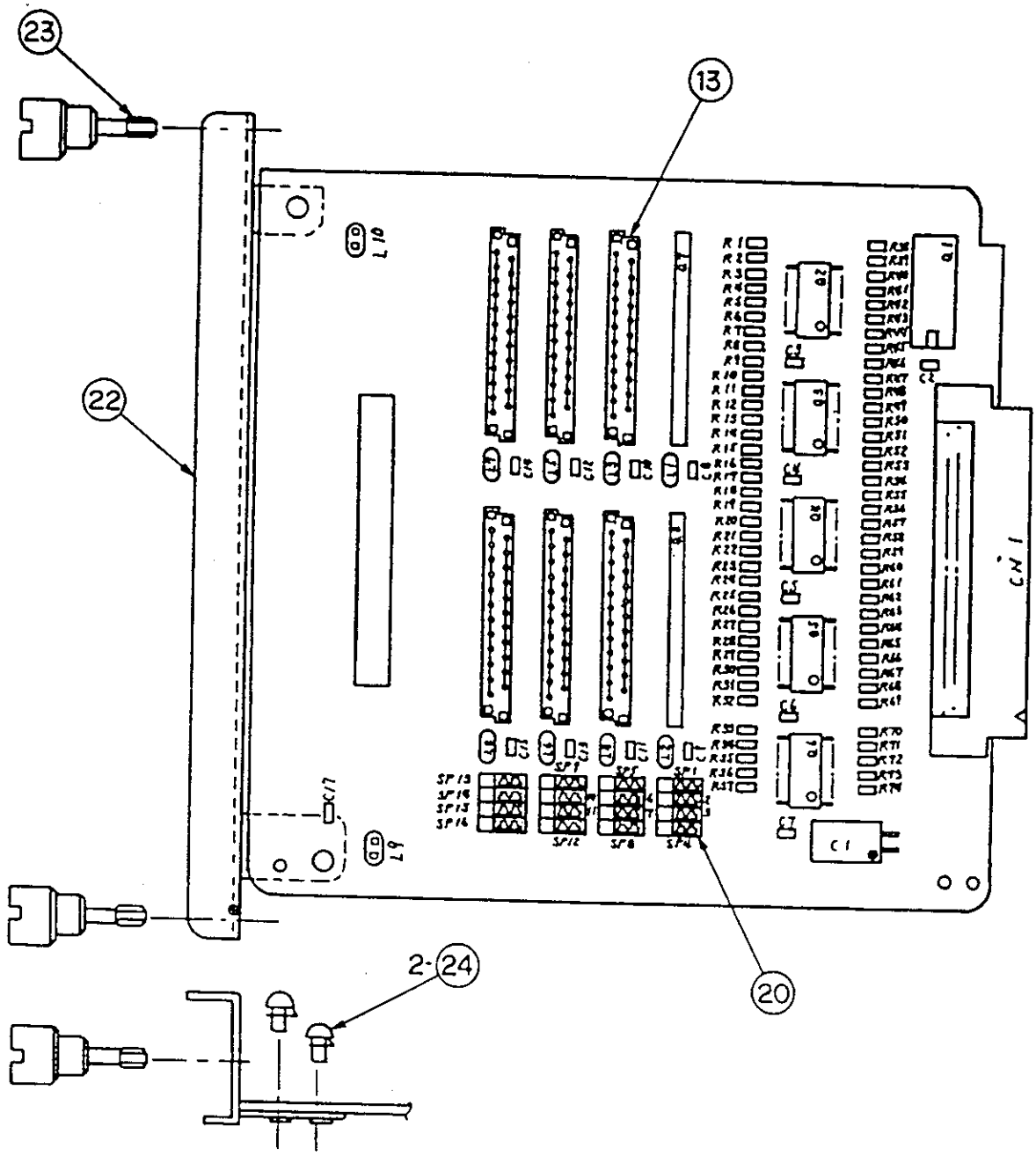
OLCB-Printed Circuit Board (Option RAM) Rev. 4
(4YA4121-1002G11 - 1/2)

OLCB-Printed Circuit Board (Option RAM) Rev. 4
(4YA4121-1002G11 - 2/2 - 1/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	R17-R20, R33-R35, R37	RM73B2A101J RN Resistor (CP)	323A5003J0101	8	
2	R1-R16, R21-R32, R36	RM73B2A680J RN Resistor (CP)	323A5003J0680	29	
3	R38-R74	2125JPW Chip jumper (CP)	323A5003P0001	37	
4					
5	C2-C15	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	14	
6	C1	KME25VB-100 25V CE Capacitor (CP) 100μF	304A1115E1101	1	
7					
8	Q4-Q6	SN74ALS244BNS BIP Digital IC (SO)	700A2550N0244B	3	
9	Q2, Q3	74ALS245AFP BIP Digital IC (SO)	700A2503N0245	2	
10	Q1	74LS21P BIP Digital IC	700A0503M0021	1	
11	Q7, Q8	514800LZP-80 MOS-D-RAM	802A0003M2605	2	
12					
13		90510-0028 IC Socket	245A1262P0280	8	
14					
15	L1-L8	ZBF253D-01 Beads filter	377A1115P1309	8	
16					
17	CN1	PQ80A2MA PC Connector	224A3515P0800	1	

OLCB-Printed Circuit Board (Option RAM) Rev. 4
(4YA4121-1002G11 - 2/2 - 2/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18					
19	SP1-SP16	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	16	
20	3	IMSA-9206H-GF PC Connector	224A4080P0020	16	
21					
22	4	Shield Plate O.P.	4PP4083-6146G002	1	
23	5	Screw	4PP4083-6149P001	2	
24	6	Screw (with pan-head SW + 2W)	+P(SW+2W)3-6-HHC	2	



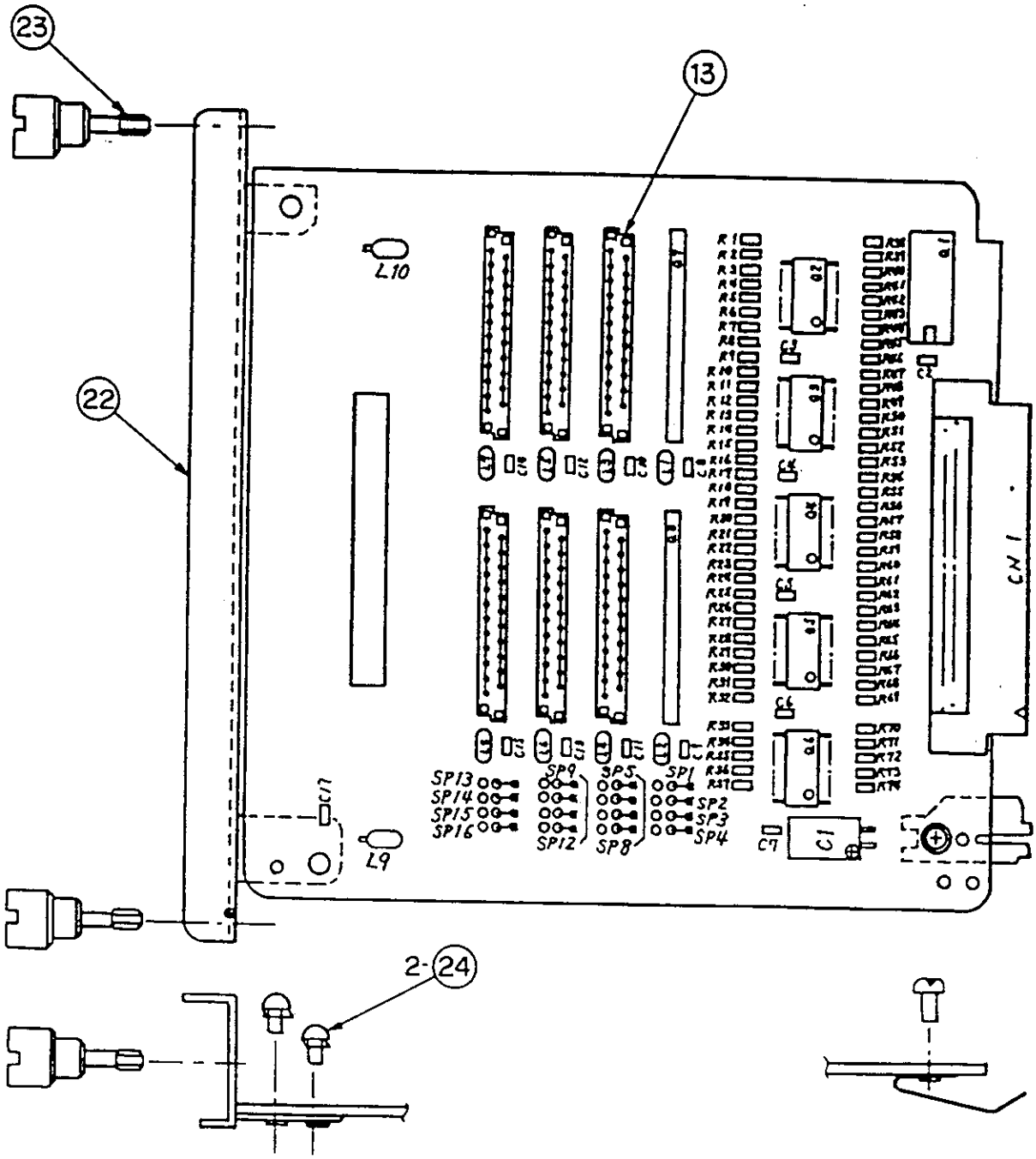
OLCB-Printed Circuit Board (Option RAM) Rev. 5 & 6
(4YA4121-1002G11 - 1/2)

OLCB-Printed Circuit Board (Option RAM) Rev. 5 & Rev. 6
(4YA4121-1002G11 - 2/2 - 1/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	R17-R20, R33-R35, R37	RM73B2A101J RN Resistor (CP)	323A5003J0101	8	
4	R1-R16, R21-R32, R36	RM73B2A680J RN Resistor (CP)	323A5003J0680	29	
5	R38-R74	2125JPW Chip jumper (CP)	323A5003P0001	37	
6					
7	C17	CC2012SL1H181J 50V CC Capacitor (CP)	303A3007K0181	1	
8	C2-C15	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	14	
9	C1	KME25VB-100 25V CE Capacitor 100µF	304A1115E1101	1	
10					
11	Q4-Q6	SN74ALS244BNS BIP Digital IC (SO)	700A2550N0244B	3	
12	Q2, Q3	74ALS245AFP BIP Digital IC (SO)	700A2503N0245	2	
13	Q1	74LS21P BIP Digital IC	700A0503M0021	1	
14	Q7, Q8	514800LZP-80 MOS-D-RAM	802A0003M2605	2	
15					
16	2	90510-0028 IC Socket	245A1262P0280	6	
17					

OLCB-Printed Circuit Board (Option RAM) Rev. 5 & Rev. 6
(4YA4121-1002G11 - 2/2 - 2/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	L1-L10	ZBF253D-01 Beads filter	377A1115P1309	10	
19					
20	CN1	PQ80A2MA PC Connector	224A3515P0800	1	
21					
22	SP1-SP16	IMSA9202B-1-03Z013GF PC Connector	224A4082P0030	16	
23	3	IMSA-9206H-GF PC Connector	224A4080P0020	16	
24					
25	4	Shield plate O.P.	4PP4083-6146G002	1	
26	5	Screw	4PP4083-6149P001	2	
27	6	Screw (with pan-head SW + 2W)	+P(SW+2W)3-6-HHC	2	



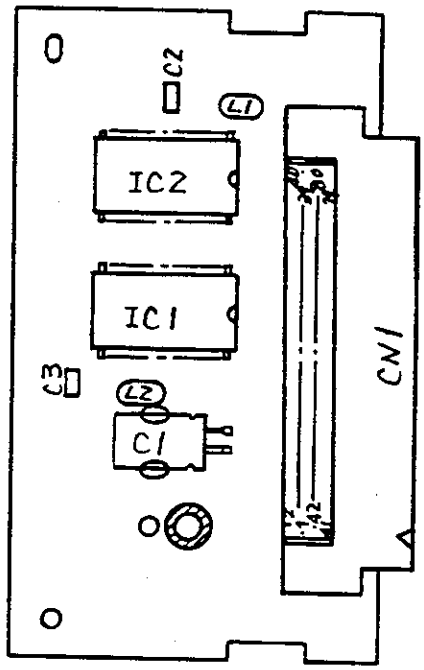
OLCB-Printed Circuit Board (Option RAM) Rev. 7
(4YA4121-1002G11 - 1/2)

OLCB-Printed Circuit Board (Option RAM) Rev. 7
(4YA4121-1002G11 - 2/2 - 1/2)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	R17-R20, R33-R35, R37	RM73B2A101J RN Resistor (CP)	323A5003J0101	16	
4	R1-R16, R21-R32, R36	RM73B2A680J RN Resistor (CP)	323A5003J0680	53	
5	R38-R74	2125JPW Chip Jumper	323A5003P0001	74	
6					
7	C17	CC2012SL1H181J 50V CC Capacitor (CP)	303A3007K0181	2	
8	C2-C15	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	28	
9	C1	KME25VB-100 25V 100μF CE Capacitor	304A1115E1101	2	
10					
11	Q4-Q6	SN74ALS244BNS BIP Digital IC (SO)	700A2550N0244B	6	
12	Q2, Q3	74ALS245AFP BIP Digital IC (SO)	700A2503N0245	4	
13	Q1	74LS21P BIP Digital IC	700A0503M0021	2	
14	Q7, Q8	514800LZP-80 MOS-D-RAM	802A0003M2605	4	
15					
16	2	90510-0028 IC Socket	245A1262P0280	12	
17	L1-L10	ZBF253D-01 Beads Filter	377A1115P1309	20	

OLCB-Printed Circuit Board (Option RAM) Rev. 7
(4YA4121-1002G11 - 2/2 - 2/2)

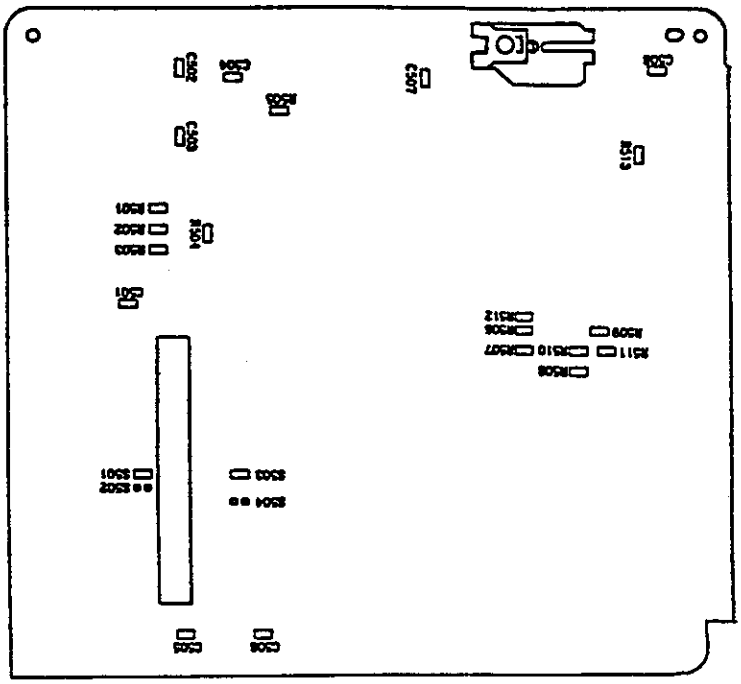
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	CN1	PQ80A2MA PC Connector	224A3515P0800	2	
19					
20	SP1-SP16	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	32	
21					
22	4	Shield plate OP	4PP4083-6146G002	2	
23	5	Screw	4PP4083-6149P001	4	
24		Screw (with pan-head SW + 2W)	+P(SW+2W)3-6-HHC	4	
25					
26	6	FG Plate (O.P. Board)	4PP4083-6059P001	2	
27		S-tight Screw (M3)	4PB4013-3104P005	2	
28					

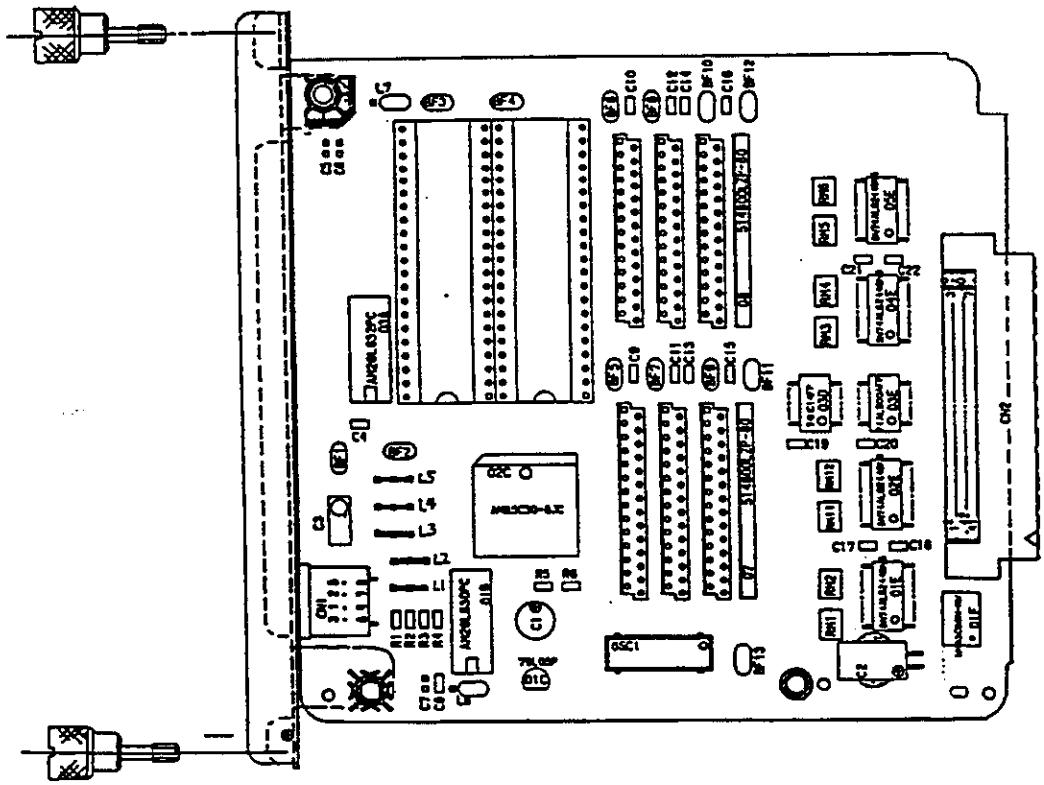


OLCF-Printed Circuit Board (Option RAM) Rev. 2
(4YA4121-1031G11 - 1/2)

OLCF-Printed Circuit Board (Option RAM) Rev. 2
(4YA4121-1031G11 - 2/2 - 1/1)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	C2, C3	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	24	
4	C1	KME25VB-100 25V CE Capacitor 100μF	304A1115E1101	12	
5					
6	IC1, IC2	MSM514800-80JS MOS-D-RAM (SO)	802A0024N2624	24	
7					
8	L1, L2	ZBF253D-01 Beads filter	377A1115P1309	24	
9					
10	CN1	PQ802A2MA PC Connector	224A3515P0800	12	





OLPT-Printed Circuit Board (PostScript Board) Rev. 5
(4YA4121-1022G11-1/2)

OLPT-Printed Circuit Board (PostScript Board) Rev. 5
(4YA4121-1022G11-2/2-1/3)

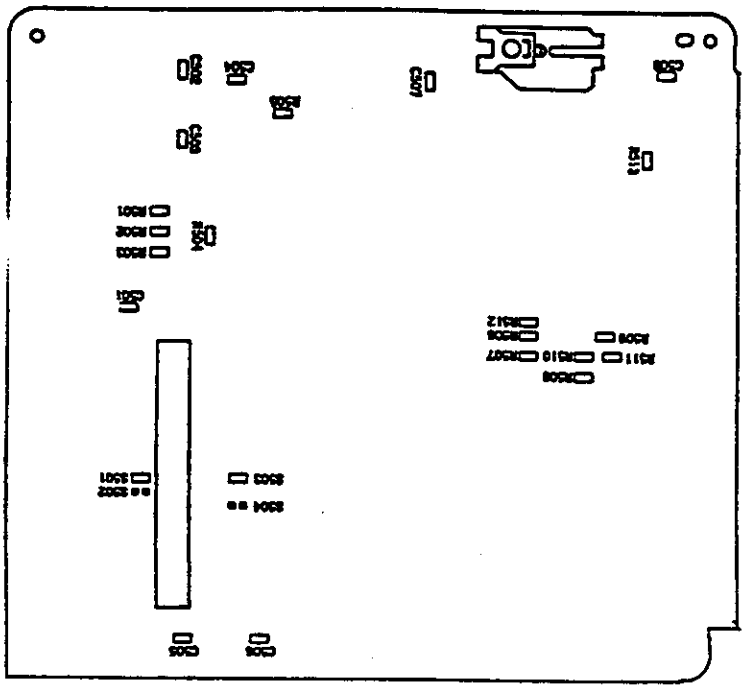
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	R5, R6	RM73B2A101J RN Resistor (CP)	323A5003J0101	4	
4	R506	RM73B2A121J RN Resistor (CP)	323A5003J0121	2	
5	R507-R510, R512, R513	RM73B2A151J RN Resistor (CP)	323A5003J0151	12	
6	R511	RM73B2A182J RN Resistor (CP)	323A5003J0182	2	
7	R1-R4	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	
8	R501-R504	RM73B2A472J RN Resistor (CP)	323A5003J0472	8	
9	R505	RM73B2A680J RN Resistor (CP)	323A5003J0680	2	
10					
11	S501, S503	2125JPW Chip jumper (CP)	323A5003P0001	4	
12					
13	RM1, RM2, RM6, RM11, RM12	MNR34J101 Block resistor (CP)	334A5003J0101	10	
14	RM3-RM5	MNR34J680 Block resistor (CP)	334A5003J0680	6	
15					
16	C3	TCK45F2E103ZYA 250V CK Capacitor 10000pF	302A4027Z5103	2	
17	C8	CC2012SL1H18J 50V CC Capacitor (CP)	303A3007K0181	2	

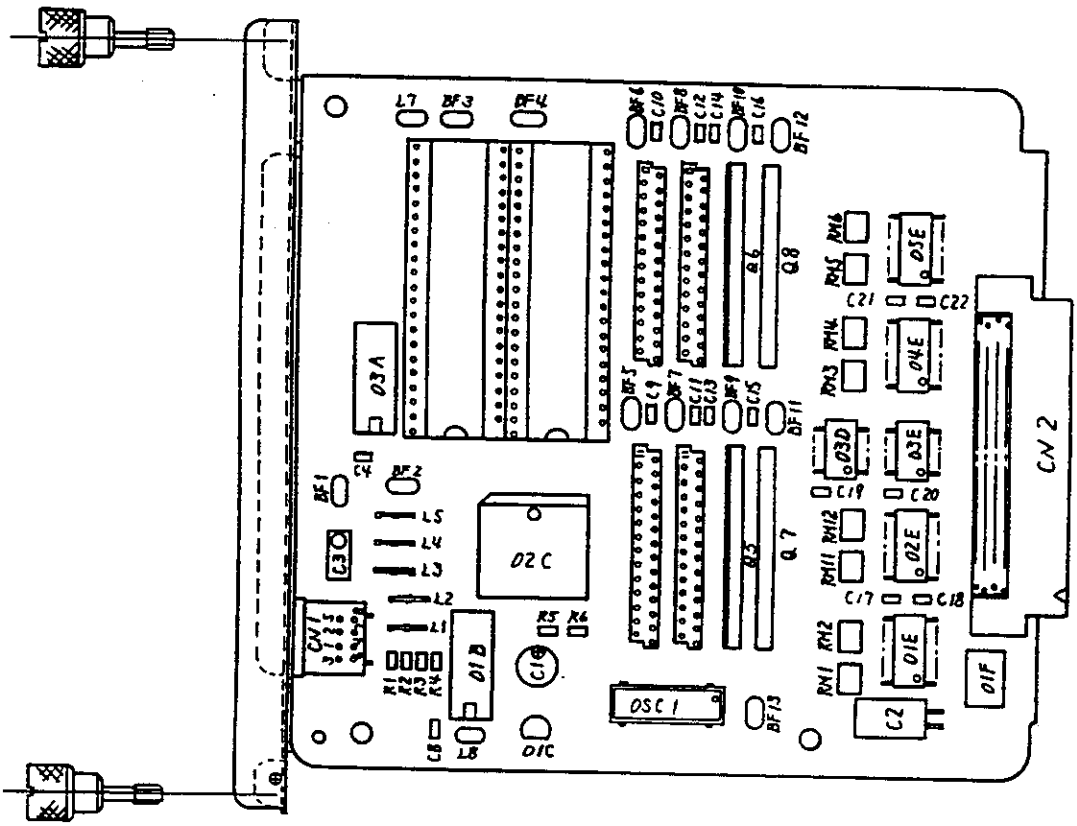
OLPT-Printed Circuit Board (PostScript Board) Rev. 5
(4YA4121-1022G11-2/2-2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	C9-C16, C19, C20	CK2012F1C474Z 16V CK Capacitor (CP)	303A6008Z1474	20	
19	C4, C17, C18, C21, C22, C501-C508	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	26	
20					
21	C1	6.3MS5-100M 6.3V CE Capacitor 100µF	304A1046J0101	2	
22	C2	KME25VB-100 25V CE Capacitor 100µF	304A1115E1101	2	
23					
24	03E	74ALS00AFP BIP Digital IC (SO)	700A2503N0000	2	
25	03D	74HC14FP MOS Digital IC (SO)	702A1703N0014	2	
26	01B	AM26LS32PC BIP-INF-IC	710A0854M0005	2	
27	03A	AM26LS32PC BIP-INF-IC	710A0854M0002	2	
28	Q7, Q8	514800LZP-80 MOS-D-RAM	802A0003M2605	4	
29	01E, 02E, 04E, 05E	SN74ALS244BNS BIP Digital IC (SO)	700A2550N0244B	8	
30	01C	79L05P BIP Linear IC	720A1000M5005	2	
31	02C	AM85C30-8JC CPU-INF-IC (CC)	855A0454N0024	2	
32	01F	NM93C66N-NW NOS-EEPROM	816A2323M0000	2	
33					
34	BF1-BF13, L7, L8	ZBF253D-01 Beads filter	377A1115P1309	30	

OLPT-Printed Circuit Board (PostScript Board) Rev. 5
(4YA4121-1022G11-2/2-3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	L1-L5	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	10	
36					
37	2	90510-0028 IC Socket	245A1262P0280	12	
38	3	DICF-42CS-E IC Socket	245A1221P0420	4	
39					
40	CN2	PQ80A2MA PC Connector	224A3515P0800	2	
41	CN1	TCS7187-01-201 Round-shaped connector	221A1780P0080	2	
42					
43	OSC1	SG-52P-3.6864MHZB Crystal oscillator	384A2137B0001	2	
44					
45	4	Shield plate O.P.	4PP4083-6146G003	2	
46	5	FG Plate (O.P. Board)	4PP4083-6059P001	2	
47	7	Screw	4PP4083-6149P001	4	
48	8	Screw (with pan-head SW + 2W)	4P (SW + 2W) 3-6-HHC	4	
49	10	S-tight screw (M3)	4PB4013-3104P005	2	
50	9	Varnished tube (black) L=4	4PP4010-1002P004	2	
51					





OLPT-2-Printed Circuit Board (PostScript Board) Rev. 5
(4YA4121-1022G12-1/2)

OLPT-2-Printed Circuit Board (PostScript Board) Rev. 5
(4YA4121-1022G12-2/2-1/3)

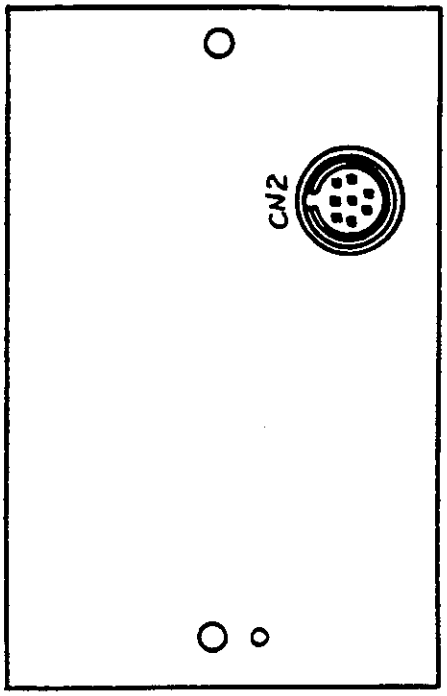
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	R5, R6	RM73B2A101J RN Resistor (CP)	323A5003J0101	4	
4	R506	RM73B2A121J RN Resistor (CP)	323A5003J0121	2	
5	R507-R510, R512, R513	RM73B2A151J RN Resistor (CP)	323A5003J0151	12	
6	R511	RM73B2A182J RN Resistor (CP)	323A5003J0182	2	
7	R1-R4	RM73B2A220J RN Resistor (CP)	323A5003J0220	8	
8	R501-R504	RM73B2A472J RN Resistor (CP)	323A5003J0472	8	
9	R505	RM73B2A680J RN Resistor (CP)	323A5003J0680	2	
10					
11	S501, S503	2125JPW Chip jumper (CP)	323A5003P0001	4	
12					
13	RM1, RM2, RM6, RM11, RM12	MNR34J101 Block resistor (CP)	334A5003J0101	10	
14	RM3-RM5	MNR34J680 Block resistor (CP)	334A5003J0680	6	
15					
16	C5	TCK45F2E103ZYA 250V CK Capacitor 10000pF	302A4027Z5103	2	
17	C3	CC2012SL1H181J 50V CC Capacitor (CP)	303A3007K0181	2	

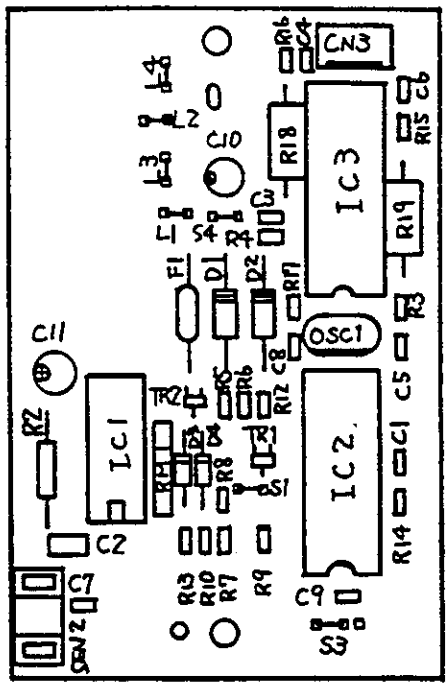
OLPT-Printed Circuit Board (PostScript Board) Rev. 5
(4YA4121-1022G11-2/2-2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	C9-C16, C19, C20	CK2012F1C474Z 16V CK Capacitor (CP)	303A6008Z1474	20	
19	C4, C17, C18, C21, C22	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	26	
20	C501-C508				
21	C1	6.3MS5-100M 6.3V CE Capacitor 100µF	304A1046J0101	2	
22	C2	KME25VB-100 25V CE Capacitor 100µF	304A1115E1101	2	
23					
24	03E	74ALS00AFP BIP Digital IC (SO)	7004A2503N0000	2	
25	03D	74HC14FP MOS Digital IC (SO)	702A1703N0014	2	
26	01B	AM26LS30PC BIP-INF-IC	710A0854M0005	2	
27	03A	AM26LS32PC BIP-INF-IC	710A0854M0002	2	
28	Q5-Q8	514800LZP-80 MOS-D-RAM	802A0003M2605	8	
29	01E, 02E, 04E, 05E	SN74ALS244BNS BIP Digital IC (SO)	700A2550N0244B	8	
30	01C	79L05P BIP Linear IC	720A1000M5005	2	
31	02C	AM85C30-8JC CPU-INF-IC (CC)	855A0454N0024	2	
32	01F	NM93C66N-NW MOS-EEPROM	816A2323M0000	2	
33					
34	BF1-BF13, L7, L8	ZBF253D-01 Beads filter	377A1115P1309	30	

OLPT-Printed Circuit Board (PostScript Board) Rev. 5
(4YA4121-1022G11-2/2-3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	L1-L5	Short wire (U-type) 0.65 P=5.0	5KH-31036-50	10	
36					
37	2	90510-0028 IC Socket	245A1262P0280	8	
38	3	DICF-42CS-E IC Socket	245A1221P0420	4	
39					
40	CN2	P080A2MA PC Connector	224A3515P0800	2	
41	CN1	TCS7187-01-201 Round-shaped connector	221A1780P0080	2	
42					
43	OSC1	SG-52P-3.6864MHZB Crystal oscillator	384A2137B0001	2	
44					
45	4	Shield plate O.P.	4PP4083-6146G003	2	
46	5	FG Plate (O.P. Board)	4PP4083-6059P001	2	
47	7	Screw	4PP4083-6149P001	4	
48	8	Screw (with pan-head SW + 2W)	4P (SW + 2W) 3-6-HHC	4	
49	10	S-tight screw (M3)	4PB4013-3104P005	2	
50	9	Varnished tube (black) L=4	4PP4010-1002P004	2	
51					





OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 1
(4YA4121-1014G11-1/2)

OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 1
(4YA4121-1014G11-2/2-1/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D1, D2	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	12	
4	D4	RD3.9E-B Zener diode	613A1231L0082	6	
5	D3	1S953/1S2075K/1S2473 Signal diode	611A0003L0001	6	
6					
7	R15, R16	RM73B2A473J RN Resistor (CP)	323A5003J0473	12	
8	R18, R19	MSF1/2B0.51ΩJ RS Resistor	324A1001J0518	12	
9	R3-R6	RM73B2A102J RN Resistor (CP)	323A5003J0102	24	
10	R2	RD1/4Y180ΩJ RD Resistor	321A1421J0181	6	
11	R7-R10, R14	RM73B2A103J RN Resistor (CP)	323A5003J0103	30	
12	R12	RM73B2A123J RN Resistor (CP)	323A5003J0123	6	
13	R17	RM73B2A561J RN Resistor (CP)	323A5003J0561	6	
14	R13	RM73B2A153J RN Resistor (CP)	323A5003J0153	6	
15	RM1	MRM-4-512JA Block resistor	334A3266J0512	6	
16					
17	C10	CEUSM2A2R2 100V CE Capacitor 2.2μF	304A1041A2229	6	

OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 1
(4YA4121-1014G11-2/2-2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	C11	10MS5-33M 10V CE Capacitor 33μF	304A1046A1330	6	
19	C2	RPE122-127E334M50 CK Capacitor 0.33μF	303A4116M3334	6	
20	C1	CC2012SL1H471J 50V CC Capacitor (CP)	303A3007K0471	6	
21	C3-C6	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	24	
22	C7-C9	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	18	
23					
24	IC3	M54646AP BIP Linear IC	720A1822M0002	6	
25	IC1	74LS38P BIP Digital IC	700A0503M0038	6	
26	IC2	LC6543N-4B52 MOS-CPU (ROM)	853A0036M0002	6	
27					
28	SEN2	SG-205-B Photo coupler	652A0114M0001	6	
29	TR1, TR2	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	12	
30	OSC1	CST4.000MGW Ceramic oscillator	381A1025B0002	6	
31					
32	S1, S3, S4, L1-L4	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	42	
33	F1	251-001 Fuse	540A2208S1102	6	
34	CN2	TCS7698-01-201 Round-shape connector	221A1622P0082	6	

OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 1
(4YA4121-1014G11-2/2-3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	6	
36					
37					
38					
39					
40					
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42					
43					
44					
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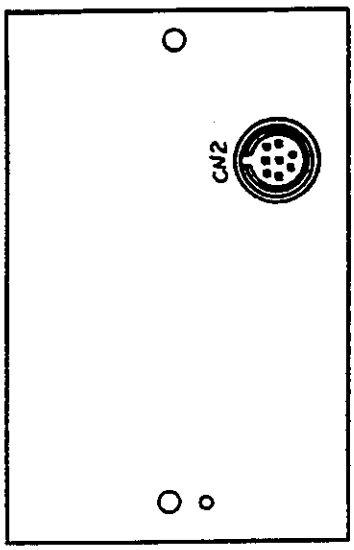
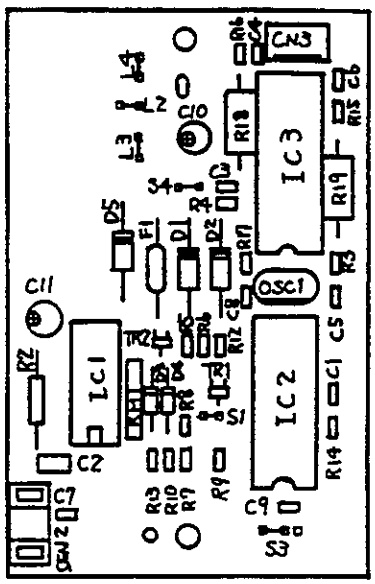
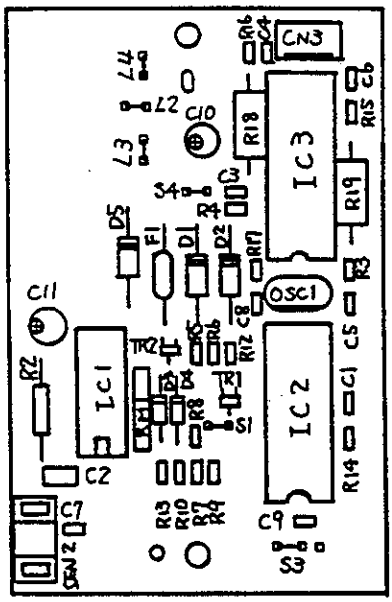
48					
49					
50					
51					



Rev. 2 & 3



Rev. 2



Rev. 3

OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 2 & 3
(4YA4121-1014G11-1/2)

OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 2 & 3
(4YA4121-1014G11-2/2-1/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D1, D2, D5	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	18	
4	D4	RD3.9E-B Zener diode	613A1231L0082	6	
5	D3	1S953/1S2075K/1S2473 Signal diode	611A0003L0001	6	
6					
7	R15, R16	RM73B2A473J RN Resistor (CP)	323A5003J0473	12	
8	R18, R19	MSF1/2B0.51ΩJ RS Resistor	324A1001J0518	12	
9	R3-R6	RM73B2A102J RN Resistor (CP)	323A5003J0102	24	
10	R2	RD1/4Y180ΩJ RD Resistor	321A1421J0181	6	
11	R7-R10, R14	RM73B2A103J RN Resistor (CP)	323A5003J0103	30	
12	R12	RM73B2A123J RN Resistor (CP)	323A5003J0123	6	
13	R17	RM73B2A561J RN Resistor (CP)	323A5003J0561	6	
14	R13	RM73B2A153J RN Resistor (CP)	323A5003J0153	6	
15	RM1	MRM-4-512JA Block resistor	334A3266J0512	6	
16					
17	C10	CEUSM1H100 50V CE Capacitor 10μF	304A1041H1100	6	

OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 2 & 3
(4YA4121-1014G11-2/2-2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	C11	10MS5-33M 10V CE Capacitor 33µF	304A1046A1330	6	
19	C2	RPE122-127E334M50 CK Capacitor 0.33µF	303A4116M3334	6	
20	C1	CC2012SL1H471J 50V CC Capacitor (CP)	303A3007K0471	6	
21	C3-C6	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	24	
22	C7-C9	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	18	
23					
24	IC3	M54646AP BIP Linear IC	720A1822M0002	6	
25	IC1	74LS38P BIP Digital IC	700A0503M0038	6	
26	IC2	LC6543N-4B52 MOS-CPU (ROM)	853A0036M0002	6	
27					
28	SEN2	SG-205-B Photo coupler	652A0114M0001	6	
29	TR1, TR2	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	12	
30	OSC1	CST4.000MGW Ceramic oscillator	381A1025B0002	6	
31					
32	S1, S3, S4, L2-L4	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	36	
33	F1	251-001 Fuse	540A2208S1102	6	
34	CN2	TCS7698-01-201 Round-shaped connector	221A1622P0082	6	

OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 2 & 3
(4YA4121-1014G11-2/2-3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	6	
36					
37					
38					
39					
40					
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43					
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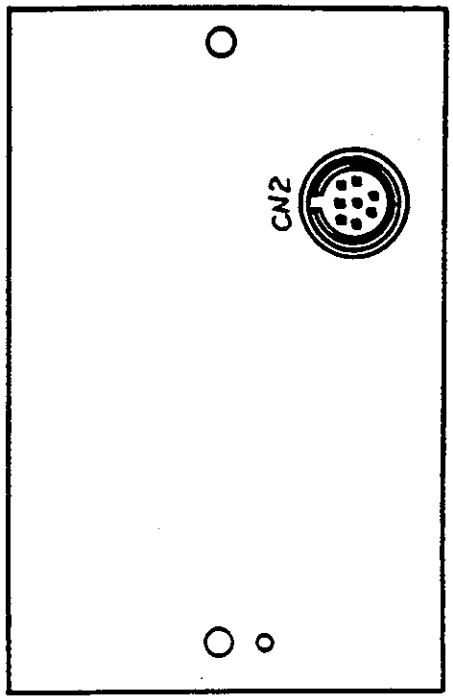
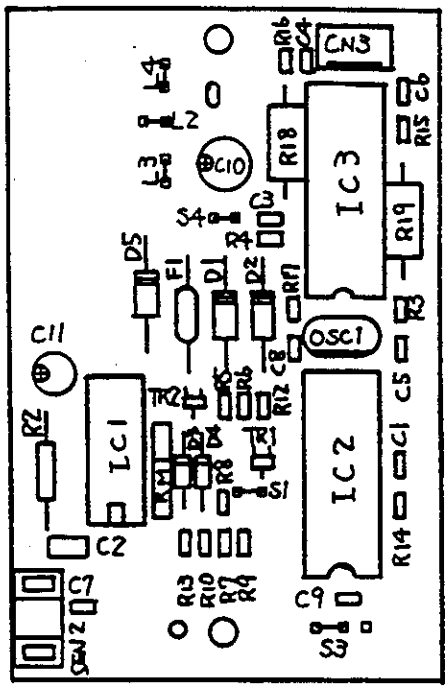
51					





OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 4
(4YA4121-1014G11-1/2)

OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 4
(4YA4121-1014G11-2/2-1/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D1, D2, D5	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	18	
4	D4	RD3.9E-B Zener diode	613A1231L0082	6	
5	D3	1S953/1S2075K/1S2473 Signal diode	611A0003L0001	6	
6					
7	R15, R16	RM73B2A473J RN Resistor (CP)	323A5003J0473	12	
8	R18, R19	MSF1/2B0.51ΩJ RS Resistor	324A1001J0518	12	
9	R3-R6	RM73B2A102J RN Resistor (CP)	323A5003J0102	24	
10	R2	RD1/4Y180ΩJ RD Resistor	321A1421J0181	6	
11	R7-R10, R14	RM73B2A103J RN Resistor (CP)	323A5003J0103	30	
12	R12	RM73B2A123J RN Resistor (CP)	323A5003J0123	6	
13	R17	RM73B2A561J RN Resistor (CP)	323A5003J0561	6	
14	R13	RM73B2A153J RN Resistor (CP)	323A5003J0153	6	
15	RM1	MRM-4-512JA Block resistor	334A3266J0512	6	
16					
17	C10	50MS5-10M 50V CE Capacitor 10μF	304A1046H1100	6	

OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 4
(4YA4121-1014G11-2/2-2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	C11	10MS5-33M 10V CE Capacitor 33μF	304A1046A1330	6	
19	C2	RPE122-127E334M50 CK Capacitor 0.33μF	303A4116M3334	6	
20	C1	CC2012SL1H471J 50V CC Capacitor (CP)	303A3007K0471	6	
21	C3-C6	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	24	
22	C7-C9	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	18	
23					
24	IC3	M54646AP BIP Linear IC	720A1822M0002	6	
25	IC1	74LS38P BIP Digital IC	700A0503M0038	6	
26	IC2	LC6543N-4B52 MOS-CPU (ROM)	853A0036M0002	6	
27					
28	SEN2	SG-205-B Photo coupler	652A0114M0001	6	
29	TR1, TR2	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	12	
30	OSC1	CST4.000MGW Ceramic oscillator	381A1025B0002	6	
31					
32	S1, S3, S4, L2-L4	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	36	
33	F1	251-001 Fuse	540A2208S1102	6	
34	CN2	TCS7698-01-201 Round-shaped connector	221A1622P0082	6	

OLEV-Printed Circuit Board (Multi-Feeder Board) Rev. 4
(4YA4121-1014G11-2/2-3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	6	
36					
37					
38					
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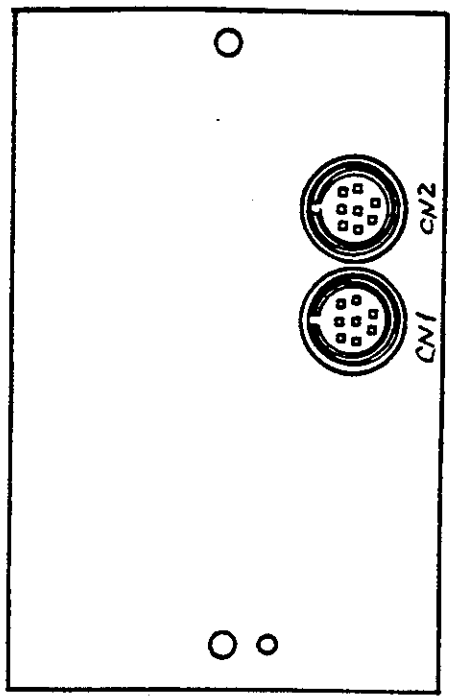
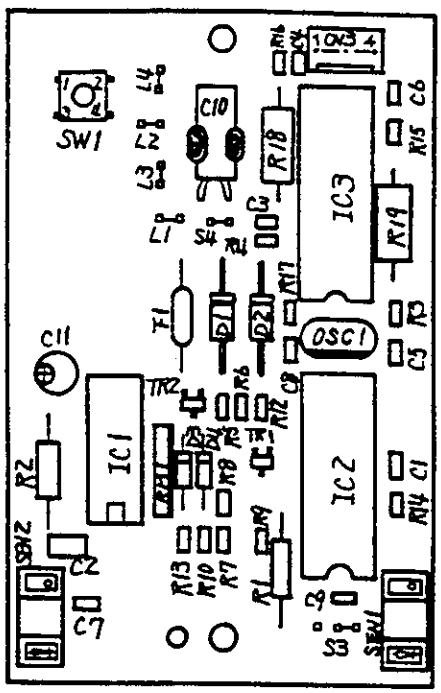
51					





OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 1
(4YA4121-1014G12-1/2)

OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 1
(4YA4121-1014G12-2/2-1/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D1, D2	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	12	
4	D4	RD3.9E-B Zener diode	613A1231L0082	6	
5	D3	1S953/1S2075K/1S2473 Signal diode	611A0003L0001	6	
6					
7	R15, R16	RM73B2A473J RN Resistor (CP)	323A5003J0473	12	
8	R18, R19	MSF1/2B0.51ΩJ RS Resistor	324A1001J0518	12	
9	R3-R6	RM73B2A102J RN Resistor (CP)	323A5003J0102	24	
10	R1, R2	RD1/4Y180ΩJ RD Resistor	321A1421J0181	12	
11	R7-R10, R14	RM73B2A103J RN Resistor (CP)	323A5003J0103	30	
12	R12	RM73B2A123J RN Resistor (CP)	323A5003J0123	6	
13	R17	RM73B2A561J RN Resistor (CP)	323A5003J0561	6	
14	R13	RM73B2A153J RN Resistor (CP)	323A5003J0153	6	
15	RM1	MRM-4-512JA Block resistor	334A3266J0512	6	
16					
17	C10	CEUSM2A2R2 100V CE Capacitor 2.2μF	304A1041A2229	6	

OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 1 (4YA4121-1014G12-2/2-2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	C11	10MS5-33M 10V CE Capacitor 33μF	304A1046A1330	6	
19	C2	RPE122-127E334M50 CK Capacitor 0.33μF	303A4116M3334	6	
20	C1	CC2012SL1H471J 50V CC Capacitor (CP)	303A3007K0471	6	
21	C3-C6	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	24	
22	C7-C9	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	18	
23					
24	IC3	M54646AP BIP Linear IC	720A1822M0002	6	
25	IC1	74LS38P BIP Digital IC	700A0503M0038	6	
26	IC2	LC6543N-4B52 MOS-CPU (ROM)	853A0036M0002	6	
27					
28	SEN1, SEN2	SG-205-B Photo coupler	652A0114M0001	12	
29	TR1, TR2	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	12	
30	OSC1	CST4.000MGW Ceramic oscillator	381A1025B0002	6	
31	SW1	B3F-1000 Push-button switch	205A1179P1000	6	
32	S3, S4, L1-L4	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	36	
33	F1	251-001 Fuse	540A2208S1102	6	
34	CN1, CN2	TCS7698-01-201 Round-shaped connector	221A1622P0082	12	

OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 1
(4YA4121-1014G12-2/2-3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	6	
36					
37					
38					
39					
40					
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43					
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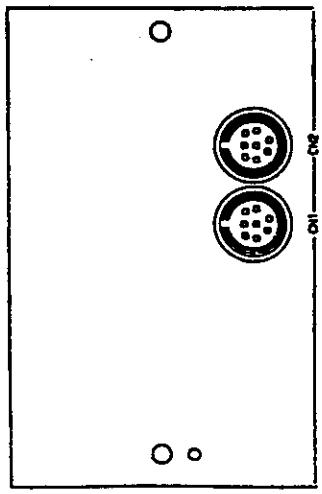
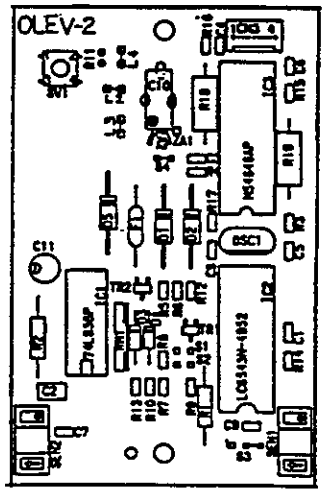
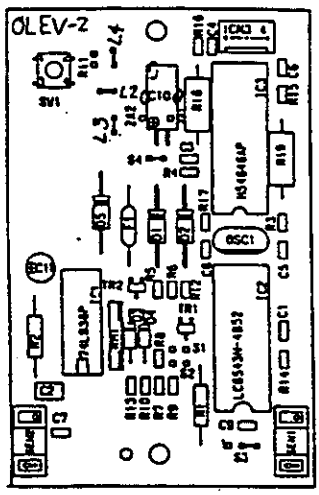
50					
51					



Rev. 2 & 3



Rev. 2



Rev. 3

OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 2 & 3
(4YA4121-1014G12-1/2)

OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 2 & 3
(4YA4121-1014G12-2/2-1/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D1, D2, D5	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	18	
4	D4	RD3.9E-B Zener diode	613A1231L0082	6	
5	D3	1S953/1S2075K/1S2473 Signal diode	611A0003L0001	6	
6					
7	R15, R16	RM73B2A473J RN Resistor (CP)	323A5003J0473	12	
8	R18, R19	MSF1/2B0.51ΩJ RS Resistor	324A1001J0518	12	
9	R3-R6	RM73B2A102J RN Resistor (CP)	323A5003J0102	24	
10	R1, R2	RD1/4Y180ΩJ RD Resistor	321A1421J0181	12	
11	R7-R10, R14	RM73B2A103J RN Resistor (CP)	323A5003J0103	30	
12	R12	RM73B2A123J RN Resistor (CP)	323A5003J0123	6	
13	R17	RM73B2A561J RN Resistor (CP)	323A5003J0561	6	
14	R13	RM73B2A153J RN Resistor (CP)	323A5003J0153	6	
15	RM1	MRM-4-512JA Block resistor	334A3266J0512	6	
16					
17	C10	CEUSM1H100 50V CE Capacitor 10μF	304A1041H1100	6	

OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 2 & 3 (4YA4121-1014G12-2/2-2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	C11	10MS5-33M 10V CE Capacitor 33µF	304A1046A1330	6	
19	C2	RPE122-127E334M50 CK Capacitor 0.33µF	303A4116M3334	6	
20	C1	CC2012SL1H471J 50V CC Capacitor (CP)	303A3007K0471	6	
21	C3-C6	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	24	
22	C7-C9	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	18	
23					
24	IC3	M54646AP BIP Linear IC	720A1822M0002	6	
25	IC1	74LS38P BIP Digital IC	700A0503M0038	6	
26	IC2	LC6543N-4B52 MOS-CPU (ROM)	853A0036M0002	6	
27					
28	SEN1, SEN2	SG-205-B Photo coupler	652A0114M0001	12	
29					
30	TR1, TR2	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	12	
31					
32	OSC1	CST4.000MGW Ceramic oscillator	381A1025B0002	6	
33					
34	SW1	B3F-1000 Push-button switch	205A1179P1000	6	

OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 2 & 3
(4YA4121-1014G12-2/2-3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35					
36	S3, S4, L2-L4	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	30	
37					
38	F1	251-001 Fuse	540A2208S1102	6	
39					
40	CN1, CN2	TCS7698-01-201 Round-shaped connector	221A1622P0082	12	
41	CN3	00-8263-0412-00-000 PC Connector	224A3357P0040	6	
42					
43					
44					
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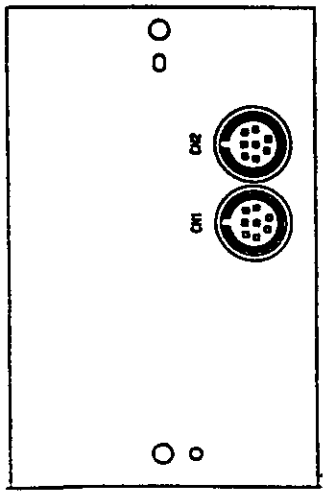
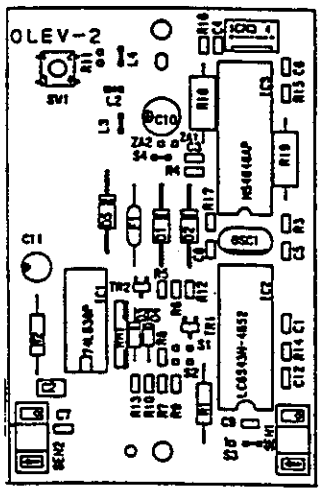
51					





OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 4
(4YA4121-1014G12-1/2)

OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 4
(4YA4121-1014G12-2/2-1/3)

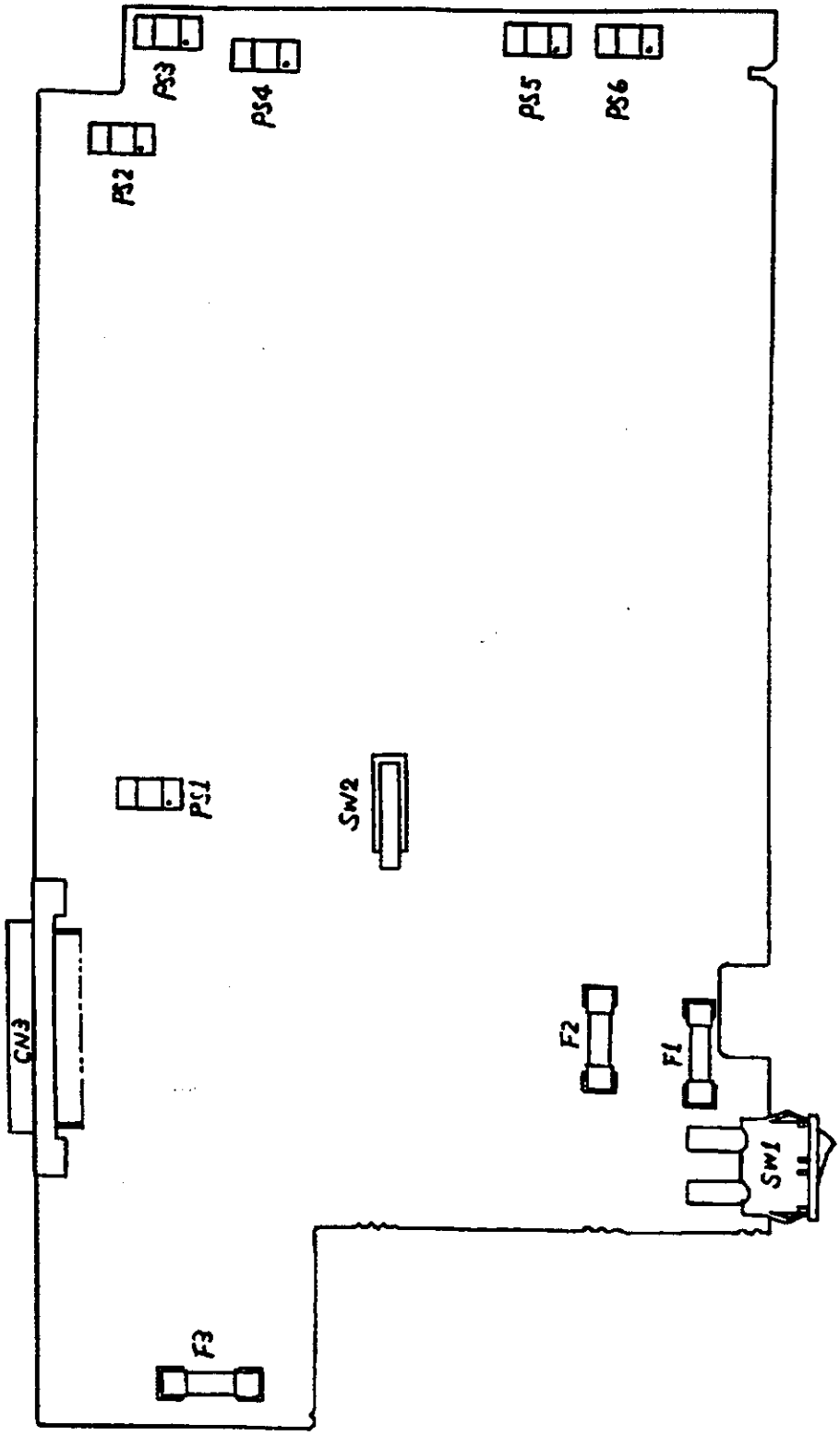
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3	D1, D2, D5	EM01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	18	
4	D4	RD3.9E-B Zener diode	613A1231L0082	6	
5	D3	1S953/1S2075K/1S2473 Signal diode	611A0003L0001	6	
6					
7	R15, R16	RM73B2A473J RN Resistor (CP)	323A5003J0473	12	
8	R18, R19	MSF1/2B0.51ΩJ RS Resistor	324A1001J0518	12	
9	R3-R6	RM73B2A102J RN Resistor (CP)	323A5003J0102	24	
10	R1, R2	RD1/4Y180ΩJ RD Resistor	321A1421J0181	12	
11	R7-R10, R14	RM73B2A103J RN Resistor (CP)	323A5003J0103	30	
12	R12	RM73B2A123J RN Resistor (CP)	323A5003J0123	6	
13	R17	RM73B2A561J RN Resistor (CP)	323A5003J0561	6	
14	R13	RM73B2A153J RN Resistor (CP)	323A5003J0153	6	
15	RM1	MRM-4-512JA Block resistor	334A3266J0512	6	
16					
17	C10	CEUS5-10M 50V CE Capacitor 2.2μF	304A1041H1100	6	

OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 4
(4YA4121-1014G12-2/2-2/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18	C11	10MS5-33M 10V CE Capacitor 33µF	304A1046A1330	6	
19	C2	RPE122-127E334M50 CK Capacitor 0.33µF	303A4116M3334	6	
20	C1	CC2012SL1H471J 50V CC Capacitor (CP)	303A3007K0471	6	
21	C3-C6	CK2012B1H102K 50V CK Capacitor (CP)	303A6008K3102	24	
22	C7-C9	CK2012F1E104Z 25V CK Capacitor (CP)	303A6008Z2104	18	
23					
24	IC3	M54646AP BIP Linear IC	720A1822M0002	6	
25	IC1	74LS38P BIP Digital IC	700A0503M0038	6	
26	IC2	LC6543N-4B52 MOS-CPU (ROM)	853A0036M0002	6	
27					
28	SEN1, SEN2	SG-205-B Photo coupler	652A0114M0001	12	
29					
30	TR1, TR2	A1344/UN2111/DTA114K PNP-HF-TR (CP)	600A1003N0003	12	
31					
32	OSC1	CST4.000MGW Ceramic oscillator	381A1025B0002	6	
33					
34	SW1	B3F-1000 Push-button switch	205A1179P1000	6	

OLEV-2-Printed Circuit Board (Second Tray Board) Rev. 4
(4YA4121-1014G12-2/2-3/3)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35					
36	S3, S4, L2-L4	Short wire (U-type) 0.65 P=2.5	5KH-31036-25	30	
37					
38	F1	251-001 Fuse	540A2208S1102	6	
39					
40	CN1, CN2	TCS7698-01-201 Round-shaped connector	221A1622P0082	12	
41	CN3	00-8263-0412-000 PC Connector	224A3357P0040	6	
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					



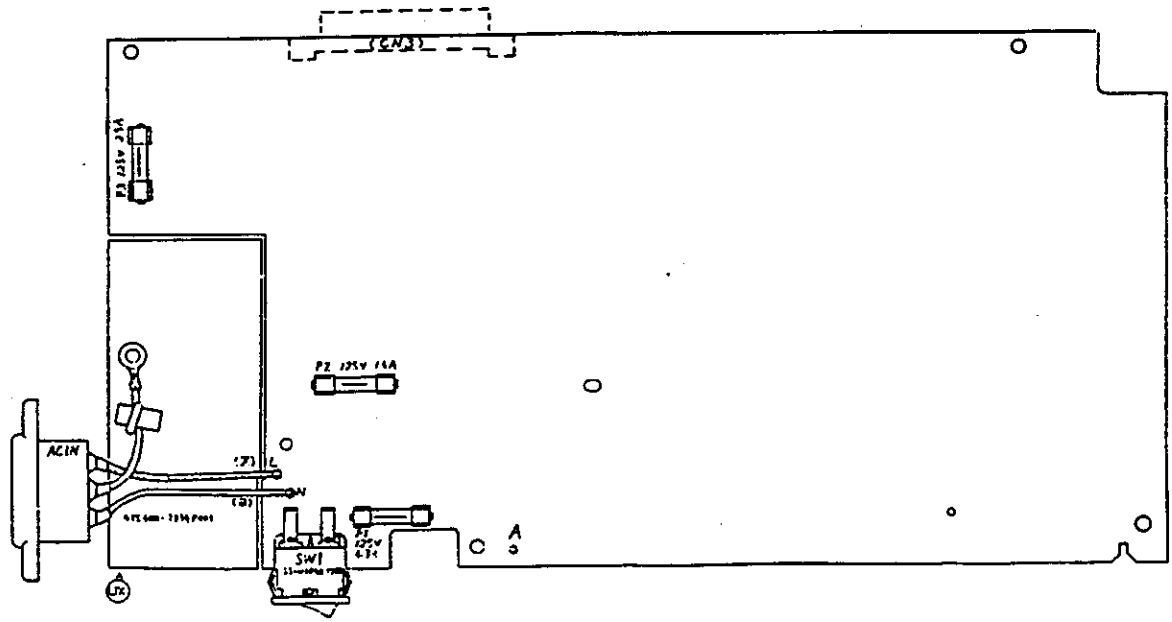
OLAA-Printed Circuit Board for 120V (4YB4049-1759P1, -1766 - 1/2)
OLAA-2 Printed Circuit Board for 230V (4YB4049-1766, -1777 - 1/2)

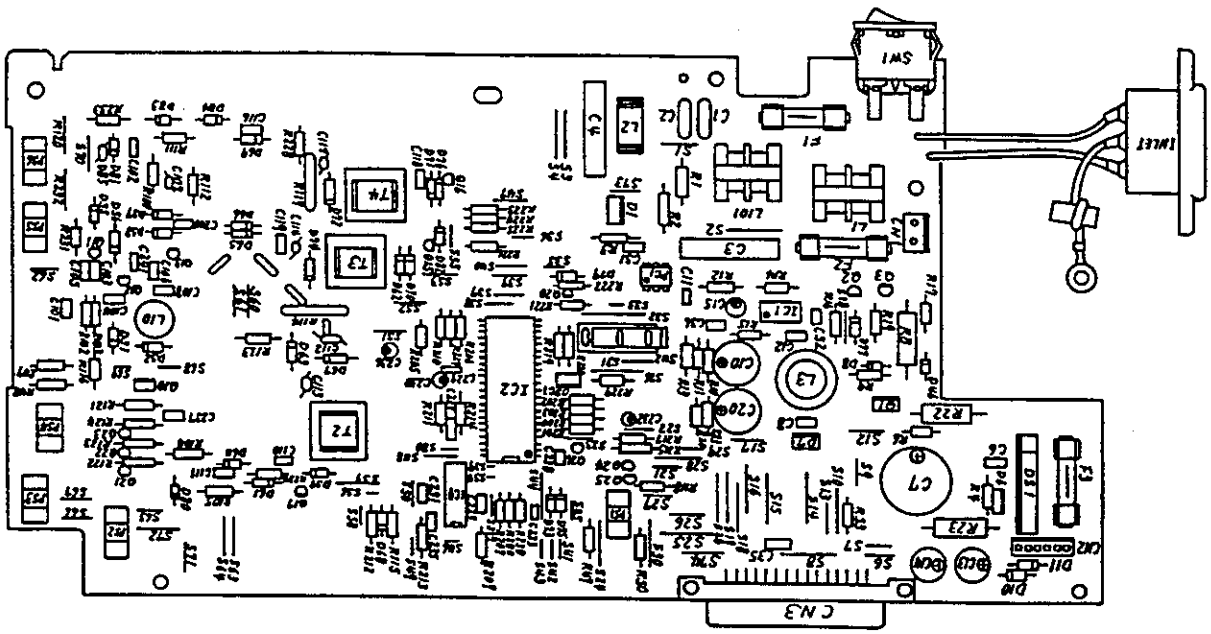
OLAA-Printed Circuit Board for 120V
(4YB4049-1759P1 - 2/2 - 1/1)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	SW1	Switch AJ7231B	4FP-20202-1	1	
2	SW2	Switch SS5GL13	4FP-20159-1	1	
3	PS1 to PS6	Photo sensor SG-205	652A0114M0001	6	
4	F1	Fuse 125V 6.3A	4FP-21054-9	1	
5	F2	Fuse 125V 1.6A	4FP-21054-3	1	
6	F3	Fuse 125V 2.5A	4FP-21046-7	1	
7	CN3	Connector	4FP-32076-32	1	

OLAA-2 Printed Circuit Board for 230V
(4YB4049-1766P1 - 2/2 - 1/1)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1	SW1	Switch AJ7231B	4FP-20202-1	1	
2	SW2	Switch SS5GL13	4FP-20159-1	1	
3	PS1 to PS6	Photo sensor SG-205	652A0114M0001	6	
4	F1	Fuse 250V 5A	4FP-21127-8	1	
5	F2	Fuse 250V 1A	4FP-21110-3	1	
6	F3	Fuse 250V 2.5A	4FP-21110-6	1	
7	CN3	Connector	4FP-32076-32	1	





OLVE-Printed Circuit Board for 120V
(4YA4049-7072G1-1/2)

OLVE-Printed Circuit Board for 120V
(4YA4049-7072G1-2/2-1/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3					
4	D6	TF341M Gate thyristor OFF	620A0026M0002	1	
5	DS1	RBV-402 Rectifier diode	610A1026M0004	1	
6	D10, 11, 46, 77	EN01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	4	
7	D51, 55-59, 62, 70, 71, 81, 83	EU02A Rectifier diode	610A0226M0016	11	
8	D7	FML-G12S Rectifier diode	610A0226M0017	1	
9	D68, 69, 73, 75, 80, 60, 61	1S953/1S2075K/1S2473 Signal diode	611A0003L0001	7	
10	D79	RD3.6E-B Zener diode	613A1231L0072	1	
11	D8	RD5.6E-B Zener diode	613A1231L0122	1	
12	D76	RD22E-B2 Zener diode	613A1231L0262B	1	
13	D82	RD27E-B2 Zener diode	613A1231L0282B	1	
14	D52, 84	1ZB300-Y/Z Zener diode	613A2003M0001	2	
15	D65, 66	1ZB390 Zener diode	613A2258M0350	2	
16	D63, 67, 72, 74	DHM3FJ60 Rectifier diode	610A0021M0001	4	
17	D85	D05-471 Varistor	632A0200M1470	1	

OLVE-Printed Circuit Board for 120V
(4YA4049-7072G1-2/2-2/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18					
19	R6, 226	RD1/4Y300ΩJ RD Resistor	321A1421J0301	2	
20	R9, 234	RD1/4Y33ΩJ RD Resistor	321A1421J0330	2	
21	R12, 215	RD1/4Y15KΩJ RD Resistor	321A1421J0153	2	
22	R13, 217	RD1/4Y3.6KΩJ RD Resistor	321A1421J0362	2	
23	R14	RD1/4Y150KΩJ RD Resistor	321A1421J0154	1	
24	R210, 211, 113, 15	RD1/4Y100KΩJ RD Resistor	321A1421J0104	4	
25	R16	RD1/4Y2.4KΩJ RD Resistor	321A1421J0242	1	
26	R4, 17, 103, 207, 208, 214, 230	RD1/4Y1KΩJ RD Resistor	321A1421J0102	7	
27					
28	R19, 102, 116	RD1/4Y330ΩJ RD Resistor	321A1421J0331	3	
29	R24	RD1/4Y150ΩJ RD Resistor	321A1421J0151	1	
30	R53	RD1/4Y16KΩJ RD Resistor	321A1421J0163	1	
31	R118	RD1/4Y4.7KΩJ RD Resistor	321A1421J0472	1	
32	R201-204, 213, 212	RD1/4Y47KΩJ RD Resistor	321A1421J0473	6	
33	R219, 228, 233	RD1/4Y1MΩJ RD Resistor	321A1421J0105	3	
34	R220	RD1/4Y2.2KΩJ RD Resistor	321A1421J0222	1	

OLVE-Printed Circuit Board for 120V
(4YA4049-7072G1-2/2-3/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R50, 121-124, 227, 229	RD1/4Y5.1KΩJ RD Resistor	321A1421J0512	7	
36	R47-49	RD1/4Y130ΩJ RD Resistor	321A1421J0131	3	
37	R221	RD1/4Y1.5KΩJ RD Resistor	321A1421J0152	1	
38	R222	RD1/4Y270ΩJ RD Resistor	321A1421J0271	1	
39	R223-225	RD1/4Y510ΩJ RD Resistor	321A1421J0511	3	
40	R100	RD1/4Y3MΩJ RD Resistor	321A1421J0305	1	
41	R104	RD1/4Y75KΩJ RD Resistor	321A1421J0753	1	
42	R105	RD1/4Y24K0ΩJ RD Resistor	321A1421J0243	1	
43	R209	RD1/4Y300KΩJ RD Resistor	321A1421J0304	1	
44					
45	R10	RNL1/4C3F20KΩ RN Resistor	323A1222F0203	1	
46	R11, 205, 206	RNL1/4C3F2.4KΩ RN Resistor	323A1222F0242	3	
47	R83	RNL1/4C3F1.0KΩ RN Resistor	323A1222F0102	1	
48	R115	RNL1/4C3F576KΩ RN Resistor	323A1222F5763	1	
49					
50	R1	RD1/2Y1MΩJ RD Resistor	321A1431J0105	1	
51	R2, 3	FMR1/2-100ΩJ Beads resistor	327A1001J0101	2	

OLVE-Printed Circuit Board for 120V
(4YA4049-7072G1-2/2-4/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52	R114, 119	HMV1/2C107K RK Resistor	326A3020K0107	2	
53					
54	R111, 112, 231	HMP1/4-106J RN Resistor	323A1029J0106	3	
55					
56	R8	MOS2-2.7KΩJL RS Resistor	324A3024J0272	1	
57	R22, 23	MOS2-390ΩJL RS Resistor	324A3024J0391	2	
58					
59					
60					
61	C118	CQMF92PP2A103J-FO CQ Capacitor 0.010μF	306A4103J2103	1	
62	C3	MKC-U-104M CF Capacitor 0.1μF	306A2275M5104	1	
63	C4	ECQ-J0187Y Spark killer	340A2014P1001	1	
64	C6, 51, 35, 52, 239, 108, 237, C233, 103, 104, 110, 111	FK16Y5V1H104Z CK Capacitor	303A4019Z3104	12	
65					
66	C8, 231, 235	DD05B331K500 500V CK Capacitor 330pF	302A4019K6331	3	
67	C10, 20	ECA0JM222 6.3V CE Capacitor 2200μF	304A1179J0222	2	
68	C11	DD07B102K500 500V CK Capacitor 1000pF	302A4019K6102	1	

OLVE-Printed Circuit Board for 120V
(4YA4049-7072G1-2/2-5/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69	C12	DD09B222K500 500V CK Capacitor 2200pF	302A4019K6222	1	
70	C15	SME16VB-47-OA 16V CE Capacitor 47μF	304A1123C1470	1	
71	C230	25MS5-33M 25V CE Capacitor 33μF	304A1046E1330	1	
72	C232, 236	SME63VB-10-OA 63V CE Capacitor 10μF	304A1123J1100	2	
73	C13, 14	ECA1CM102 16V CE Capacitor 1000μF	304A1179C1102	2	
74	C228, 229	CK92C1H102MS 50V CK Capacitor 0.001μF	303A4115M3102	2	
75	C116	FK16Y5V1H473Z CK Capacitor	303A4019Z3473	1	
76	C238	CK92C1H333MS 50V CK Capacitor 0.033μF	303A4115M3333	1	
77	C240, 241	DD05-63SL390J500 CC Capacitor 39pF	302A1202K0390	2	
78	C101, 102, 106	DD05B471K500 500V CK Capacitor 470pF	302A4019K6471	3	
79	C105, 107, 119	DE0705B471K1K 1KV CK Capacitor 470pF	302A4028K0471A	3	
80	C113, 114, 117	DE0707B471K3K 3.15KV CK Capacitor 470pF	302A4028K2471	3	
81	C7	UVR1H332MHA1CA 50V CE Capacitor 3300μF	304A1005H1332	1	
82	C112	DE1010B471K6K 6KV CK Capacitor 470pF	302A4028K4471	1	
83	C36	CK92C1H681MS 50V CK Capacitor 680pF	303A4115M3681	1	
84					
85	Q1	2SB1258 PNP-LF-TR	601A1226M0001	1	

OLVE-Printed Circuit Board for 120V
(4YA4049-7072G1-2/2-6/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	Q3, 21-23	2SC1815-Y NPN-HF-TR	602A1025M006Y	4	
87	Q10	2SC2752 NPN-HF-TR	602A1223M0039	1	
88	Q2, 24, 26	2SC3400 NPN-HF-TR	602A1032M0004	3	
89	Q20	2SA608SP/2SA933S PNP-HF-TR	600A1003M0001	1	
90	Q25	DTA114S PNP-HF-TR	600A1035M0005	1	
91	D1	TM1241I-LE-LF625 Gate thyristor switch	622A0026M0004	1	
92	Q15-17	2SC2235-Y NPN-HF-TR	602A1125M0039Y	3	
93	Q11, 13	BCR1AM-12 Gate thyristor switch	622A0022M0014	2	
94	Q12	CR04AM-12 Gate thyristor OFF	620A0022M0008	1	
95					
96					
97	IC2	LC97000A-983 MOS Digital	702A4731M0003	1	
98	PC1	TLP666JF/S21ME4FY Photo coupler	652A0203M0002	1	
99	PS1-6	SG-206 Photo coupler	652A0114M0003	6	
100	C1	FA7617P-1 BIP Linear IC	720A0843M0001	1	
101	IC4	324P BIP Linear IC	720A0000M0002	1	
102					

OLVE-Printed Circuit Board for 120V
(4YA4049-7072G1-2/2-7/9)

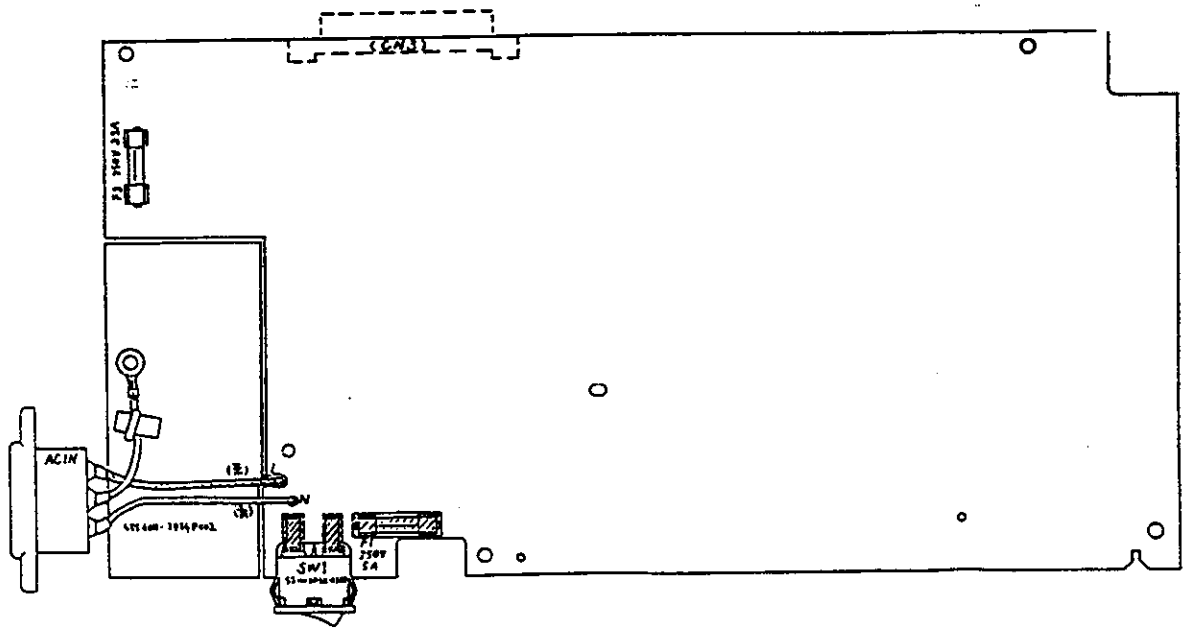
REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103					
104	OSC1	CST1.80MG040 Ceramic oscillator	381A1054B0001	1	
105	L2	SN8S-300/SF-T8-30S P-Coil	350A0221P1001	1	
106	L3	SK-21P-060-550S P-Coil	350A2510P0551	1	
107	L101	SU16VD-40020 Power Coil	350A2027P0200	1	
108	L1	SU10V07040/FUS325020 Power Coil	350A223P0402	1	
109	L10	C-14576 P-Coil	350A2511P0102	1	
110	T2	High voltage transformer	4YB4049-7078P001	1	
111	T3	High voltage transformer	4YB4049-7078P002	1	
112	T4	High voltage transformer	4YB4049-7078P003	1	
113					
114					
115	CN1	5281-02A PC Connector	224A3907P0020	1	
116	CN2	00-8263-0612-00-000 PC Connector	224A3357P0060	1	
117	CN3	00-8345-232-990-012 PC Connector	224A3812P0320	1	
118					
119					

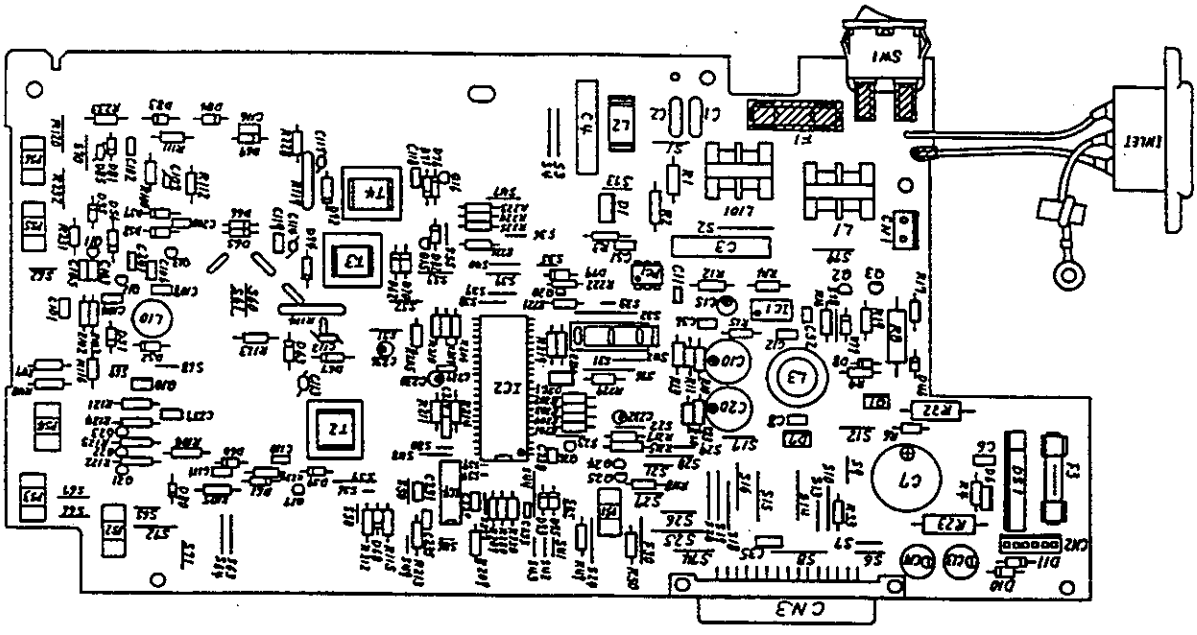
OLVE-Printed Circuit Board for 120V
(4YA4049-7072G1-2/2-8/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
120	F1	51MS063L Fuse	540A2076N0632	1	
121	F2	51MS016L Fuse	540A2076N0162	1	
122	F3	GGS2-1/2 Fuse	540A2036M1252	1	
123	2	FP-213 Fuse holder	4LP-7142	6	
124					
125	SW1	SJ-W2P4A-03BB Toggle switch	200A3220P2000	1	
126	SW2	SS-5GL13 Micro switch	207A1025P0001	1	
127	INLET	Special cord	4YS4011-2894P001	1	
128					
129	S29, 33, 46, 53, 54, 56, 59, 69, 80	0.65 Tin plated annealed copper wire	TA-0.65	9	
130					
131	S6, 7, 9, 11-13, 17, 21-23, 26, 27, 31, 37-40, 47, 48, 50-52, 55, 60-62, 66, 67, 71, 73, 77, 78	0.65 Tin plated annealed copper wire	TA-0.65	32	
132					
133					
134					
135	S2-4, 8, 10, 14-16, 18-20, 25, 28, 30, 32, 76	0.65 Tin plated annealed copper wire	TA-0.65	16	
136					

OLVE-Printed Circuit Board for 120V
(4YA4049-7072G1-2/2-9/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
137	S1, 44, 57, 63, 64, 70, 72, 74, 24, R120, R232	0.65 Tin plated annealed copper wire	TA-0.65	11	
138					
139	S35, 36, 41-43, 45, 49, 58, 65, 68	0.65 Tin plated annealed copper wire	TA-0.65	10	





OLVH-Printed Circuit Board for 230V
(4YA4049-7072G2-1/2)

OLVH-Printed Circuit Board for 230V
(4YA4049-7072G2-2/2-1/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
1					
2					
3					
4	D6	TF341M Gate thyristor OFF	620A0026M0002	1	
5	DS1	RBV-402 Rectifier diode	610A1026M0004	1	
6	D10, 11, 46, 77	EN01Z/SM1XN02/DSM1D2 Rectifier diode	610A0003M0001	4	
7	D51, 55-59, 62, 70, 71, 81, 83	EU02A Rectifier diode	610A0226M0016	11	
8	D7	FML-G12S Rectifier diode	610A226M0017	1	
9	D68, 69, 73, 75, 80, 60, 61	1S953/1S2075K/1S2473 Signal diode	611A0003L0001	7	
10	D79	RD3.6E-B Zener diode	613A1231L0072	1	
11	D8	RD5.6E-B Zener diode	613A1231L0122	1	
12	D76	RD22E-B2 Zener diode	613A1231L0262B	1	
13	D82	RD27E-B2 Zener diode	613A1231L0282B	1	
14	D52, 84	1ZB300-Y/Z Zener diode	613A2003M0001	2	
15	D65, 66	1ZB390 Zener diode	613A2258M350	2	
16	D63, 67, 72, 74	DHM3FJ60 Rectifier diode	610A0021M0001	4	
17	D85	D05-471 Varistor	632A0200M1470	1	

OLVH-Printed Circuit Board for 230V
(4YA4049-7072G2-2/2-2/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
18					
19	R6, 226	RD1/4Y300ΩJ RD Resistor	321A1421J0301	2	
20	R9, 234	RD1/4Y33ΩJ RD Resistor	321A1421J0330	2	
21	R12, 215	RD1/4Y15KΩJ RD Resistor	321A1421J0153	2	
22	R13, 217	RD1/4Y3.6KΩJ RD Resistor	321A1421J0362	2	
23	R14	RD1/4Y150KΩJ RD Resistor	321A1421J0154	1	
24	R210, 211, 113, 15	RD1/4Y100KΩJ RD Resistor	321A1421J0104	4	
25	R16	RD1/4Y2.4KΩJ RD Resistor	321A1421J0242	1	
26	R4, 17, 103, 207, 208, 214, 230	RD1/4Y1KΩJ RD Resistor	321A1421J0102	7	
27					
28	R19, 102, 116	RD1/4Y330ΩJ RD Resistor	321A1421J0331	3	
29	R24	RD1/4Y150ΩJ RD Resistor	321A1421J0151	1	
30	R53	RD1/4Y16KΩJ RD Resistor	321A1421J0163	1	
31	R118	RD1/4Y4.7KΩJ RD Resistor	321A1421J0472	1	
32	R201-204, 212, 213	RD1/4Y47KΩJ RD Resistor	321A1421J0473	6	
33	R219, 228, 233	RD1/4Y1MΩJ RD Resistor	321A1421J0105	3	
34	R220	RD1/4Y2.2KΩJ RD Resistor	321A1421J0222	1	

OLVH-Printed Circuit Board for 230V
(4YA4049-7072G2-2/2-3/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
35	R50, 121-124, 227, 229	RD1/4Y5.1KΩJ RD Resistor	321A1421J0512	7	
36	R47-49	RD1/4Y130ΩJ RD Resistor	321A1421J0131	3	
37	R221	RD1/4Y1.5KΩJ RD Resistor	321A1421J0152	1	
38	R222	RD1/4Y270ΩJ RD Resistor	321A1421J0271	1	
39	R223-225	RD1/4Y510ΩJ RD Resistor	321A1421J0511	3	
40	R100	RD1/4Y3MΩJ RD Resistor	321A1421J0305	1	
41	R104	RD1/4Y75KΩJ RD Resistor	321A1421J0753	1	
42	R105	RD1/4Y24K0ΩJ RD Resistor	321A1421J0243	1	
43	R209	RD1/4Y300KΩJ RD Resistor	321A1421J0304	1	
44					
45	R10	RNL1/4C3F20KΩ RN Resistor	323A1222F0203	1	
46	R11, 205, 206	RNL1/4C3F2.4KΩ RN Resistor	323A1222F0242	3	
47	R83	RNL1/4C3F1.0KΩ RN Resistor	323A1222F0102	1	
48	R115	RNL1/4C3F576KΩ RN Resistor	323A1222F5763	1	
49					
50	R1	RD1/2Y1MΩJ RD Resistor	321A1431J0105	1	
51	R2, 3	FMR1/2-100ΩJ Beads resistor	327A1001J0101	2	

OLVH-Printed Circuit Board for 230V
(4YA4049-7072G2-2/2-4/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
52	R114, 119	HMV1/2C107K RK Resistor	326A3020K0107	2	
53					
54	R111, 112, 231	HMP1/4-106J RN Resistor	323A1029J0106	3	
55					
56	R8	MOS2-2.7KΩJL RS Resistor	324A3024J0272	1	
57	R22, 23	MOS2-390ΩJL RS Resistor	324A3024J0391	2	
58					
59	C1, 2	DE7100F222M-VA1-KC CK Capacitor 2200pF	302A4037M6222	2	
60	C118	CQMF92PP2A103J-FO CQ Capacitor 0.010μF	306A4103J2103	1	
61	C3	MKC-U-104M CF Capacitor 0.1μF	306A2275M5104	1	
62	C4	ECQ-J0187Y Spark killer	340A2014P1001	1	
63	C6, 51, 35, 52, 239, 108, 237, C233, 103, 104, 110, 111	FK16Y5V1H104Z CK Capacitor	303A4019Z3104	12	
64					
65	C8, 231, 235	DD05B331K500 500V CK Capacitor 330pF	302A4019K6331	3	
66	C10, 20	ECA0JM222 6.3V CE Capacitor 2200μF	304A1179J0222	2	
67	C11	DD07B102K500 500V CK Capacitor 1000pF	302A4019K6102	1	
68	C12	DD09B222K500 500V CK Capacitor 2200pF	302A4019K6222	1	

OLVH-Printed Circuit Board for 230V
(4YA4049-7072G2-2/2-5/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
69	C15	SME16V-47-OA 16V CE Capacitor 47µF	304A1123C1470	1	
70	C230	25MS5-33M 25V CE Capacitor 33µF	304A1046E1330	1	
71	C232, 236	SME63VB-10-OA 63V CE Capacitor 10µF	304A1123J1100	2	
72	C13, 14	ECA1CM102 16V CE Capacitor 1000µF	304A1179C1102	2	
73	C228, 229	CK92C1H102MS 50V CK Capacitor 0.001µF	303A4115M3102	2	
74	C116	FK16Y5V1H473Z CK Capacitor	303A4019Z3473	1	
75	C238	CK92C1H333MS 50V CK Capacitor 0.033µF	303A4115M3333	1	
76	C240, 241	DD05-63SL390J500 CC Capacitor 39pF	302A1202K0390	2	
77	C101, 102, 106	DD05B471K500 500V CK Capacitor 470pF	302A4019K6471	3	
78	C105, 107, 119	DE0705B471K1K 1KV CK Capacitor 470pF	302A4028K0471A	3	
79	C113, 114, 117	DE070B471K3K 3.15KV CK Capacitor 470pF	302A4028K2471	3	
80	C7	UVR1H332MHA1CA 50V CE Capacitor 3300µF	304A1005H1332	1	
81	C112	DE1010B471K6K 6KV CK Capacitor 470pF	302A4028K4471	1	
82	C36	CK92C1H681MS 50V CK Capacitor 680pF	303A4115M3681	1	
83					
84					
85	Q1	2SB1258 PNP-LF-TR	601A1226M0001	1	

OLVH-Printed Circuit Board for 230V
(4YA4049-7072G2-2/2-6/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
86	Q3, 21-23	2SC1815-Y NPN-HF-TR	602A1025M006Y	4	
87	Q10	2SC2752 NPN-HF-TR	602A1223M0039	1	
88	Q2, 24, 26	2SC3400 NPN-HF-TR	602A1032M0004	3	
89	Q20	2SA608SP/2SA933S PNP-HF-TR	600A1003M0001	1	
90	Q25	DTA114S PNP-HF-TR	600A1035M0005	1	
91	D1	TM1241I-LE-LF625 Gate thyristor switch	622A0026M0004	1	
92	Q15-17	2SC2235-Y NPN-HF-TR	602A1125M0039Y	3	
93	Q11, 13	BCR1AM-12 Gate thyristor switch	622A0022M0014	2	
94	Q12	CR04AM-12 Gate thyristor OFF	620A0022M0008	1	
95					
96					
97	IC2	LC97000A-983 MOS Digital	702A4731M0003	1	
98	PC1	TLP666JF/S21ME4FY Photo coupler	652A0203M0002	1	
99	PS1-6	SG-206 Photo coupler	652A0114M0003	6	
100	C1	FA7617P-1 BIP Linear IC	720A0843M0001	1	
101	IC4	324P BIP Linear IC	720A0000M0002	1	
102					

OLVH-Printed Circuit Board for 230V
(4YA4049-7072G2-2/2-7/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
103					
104	OSC1	CST1.80MG040 Ceramic oscillator	381A1054B0001	1	
105	L2	SN8S-300/SF-T8-30S P-Coil	350A0221P1001	1	
106	L3	SK-21P-060-550S P-Coil	350A2510P0551	1	
107	L101	SU16VD-40020 Power Coil	350A2027P0200	1	
108	L1	SU10V07040/FUS325020 Power Coil	350A223P0402	1	
109	L10	C-14576 P-Coil	350A2511P0102	1	
110	T2	High voltage transformer	4YB4049-7078P001	1	
111	T3	High voltage transformer	4YB4049-7078P002	1	
112	T4	High voltage transformer	4YB4049-7078P003	1	
113					
114					
115	CN1	5281-02A PC Connector	224A3907P0020	1	
116	CN2	00-8263-0612-00-000 PC Connector	224A3357P0060	1	
117	CN3	00-8345-232-990-012 PC Connector	224A3812P0320	1	
118					
119					

OLVH-Printed Circuit Board for 230V
(4YA4049-7072G2-2/2-8/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
120	F1	19181-5A Fuse	540A2123T2502	1	
121	F3	21702.5 Fuse	540A2221S0252	1	
122	2	FP-213 Fuse holder	4LP-7142	4	
123	4	840622-23 Fuse cover	242A7041P0001	1	
124	5	Sumi tube F2 (internal dia. 5/white)	LY-80094-5-WE	2	L=19MM
125	SW1	SJ-W2P4A-03BB Toggle switch	200A3220P2000	1	
126	SW2	SS-5GL13 (149) Micro switch	207A1048P0001	1	
127	INLET	Special cord	4YS4011-2894P002	1	
128	3	201840-23 Board-in sleeve	121A1037P0001	1	
129	S29, 33, 46, 53, 54, 56, 59, 69, 80	0.65 Tin plated annealed copper	TA-0.65	9	L=32MM P=5.0
130					
131	S6, 7, 9, 11-13, 17, 21-23, 26, 27, 31, 37-40, 47, 48, 50-52, 55,	0.65 Tin plated annealed copper	TA-0.65	33	L=32MM P=10
132	60-62, 66, 67, 71, 73, 77, 78, 79				
133					
134					
135	S2-4, 8, 10, 14-16, 18-20, 25, 28, 30, 32, 76	0.65 Tin plated annealed copper	TA-0.65	16	L=32MM P=15
136					

OLVH-Printed Circuit Board for 230V
(4YA4049-7072G2-2/2-9/9)

REF. NO.	SYMBOL	TYPE/NAME	PART NO.	Q'TY	REMARKS
137	S1, 44, 57, 63, 64, 70, 72, 74, 24, R120, R232	0.65 Tin plated annealed copper	TA-0.65	11	L=32MM P=12.5
138					
139	S35, 36, 41-43, 45, 49, 58, 65, 68	0.65 Tin plated annealed copper	TA-0.65	10	L=32MM P=7.5
140					
141					
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